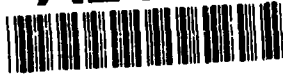


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POLITICS, WORK AND DAILY LIFE IN THE USSR.

A SURVEY OF FORMER SOVIET CITIZENS

*Edited and with an Introduction by
James R. Millar*

*To be published by
Cambridge University Press*

91-15940



Data for this study were produced by the Soviet Interview Project. This Project was supported by Contract No. 701 from the National Council for Soviet and East European Research to the University of Illinois at Urbana-Champaign, James R. Millar, Principal Investigator. The analysis and interpretations in this study are those of the authors, not necessarily of the sponsors.

91 1119 067

84-1062

Funding for the research which resulted in this Report was provided by the U.S. Department of State which, however, is not responsible for its contents or findings.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for information operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)

2. REPORT DATE

1 Jan 84

3. REPORT TYPE AND DATES COVERED

FINAL: JANUARY 1984

4. TITLE AND SUBTITLE

POLITICS, WORK AND DAILY LIFE IN THE USSR, A SURVEY OF FORMER SOVIET CITIZENS

5. FUNDING NUMBERS

c: NONE

6. AUTHOR(S) J. Millar

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

University of Illinois
Urbana-Champaign, IL

8. PERFORMING ORGANIZATION REPORT NUMBER

NONE

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

Office of Net Assessment
Office of Secretary of Defense
The Pentagon, Room 3A930
Washington, DC 20301-2950

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

84-1062

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT

A. Approved for public release; distribution is unlimited.

12b. DISTRIBUTION CODE

13. ABSTRACT

Presents data produced by the Soviet Interview project.

14. SUBJECT TERMS

Soviet Union Emigrant Interviews

15. NUMBER OF PAGES

744

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT

UNCLASSIFIED

18. SECURITY CLASSIFICATION OF THIS PAGE

UNCLASSIFIED

19. SECURITY CLASSIFICATION OF ABSTRACT

UNCLASSIFIED

20. LIMITATION OF ABSTRACT

SAR

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std Z39-18
298-102

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Accession For	
NAME	GRAND
DATE	YAB
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Justification	
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Availability Dates	
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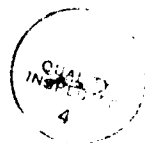


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INTRODUCTION

Chapter One

History, Method, and the Problem of Bias

James R. Millar

INTRODUCTION: HISTORY, METHOD
AND THE PROBLEM OF BIAS

→ The Soviet Interview Project (SIP) has interviewed thousands of recent emigrants from the Soviet Union as a means of learning about politics, work and daily life in the contemporary USSR. The project was designed by a team of Soviet specialists as a study of everyday life in the USSR with the expectation that the results will contribute not only to Sovietology, but also to general theories in the basic disciplines represented by the research team - notably political science, economics and sociology.¹ The initial phase of the project has involved administering highly structured questionnaires covering a wide range of topics bearing on life, work and politics in contemporary Soviet society to a probability sample of eligible Soviet emigrants currently residing in the United States. As the principal aim has been to learn about life in the Soviet Union, the absorption process has been of interest for validation purposes only. The essays collected in this volume represent a first strike from the data set.²

The purpose of this chapter is to provide a brief history of the Soviet Interview Project, a description of the methods and procedures that have guided the SIP General Survey I, and an overview of first findings.

HISTORY

On August 3, 1979, a meeting was held at the Kennan Institute to promote a project to interview recent Soviet emigrants to the United States. The meeting's organizers were senior academic scholars and interested U.S. Government specialists, some of whom had been involved in the Harvard Project on the Soviet Social System of the early 1950s.³ The Harvard Project was a pioneering survey effort that sought to assay the "strengths and vulnerabilities of the Soviet social system" by interviewing expatriate Russians in displaced-person camps in Allied-occupied Europe following World War II.⁴

Despite the seemingly unpromising character of its sample, the Harvard study is widely regarded today as a success. With funding from the U.S. Air Force, principal investigators Clyde Kluckhohn, Alex Inkeles and Raymond Bauer of the Harvard Russian Research Center sought to learn about life under Stalin by interviewing former citizens of the USSR who had elected not to return home after the war. Most of them had had their lives in the Soviet Union disrupted ten or more years earlier by the war, and all hoped to be allowed to stay in the West.

The results of the Harvard study have withstood the test of time, including the unanticipated release of large quantities of new data on Soviet society and the opening of Russia's borders to foreign visitors by Khrushchev after he consolidated power in the mid-1950s. Moreover, as any Soviet specialist may confirm, the Harvard Project established paradigms for the study of Soviet

society that, to a surprising extent, still inform research in the West to this day.

When, in the 1970s, tens of thousands of Soviet citizens were allowed to leave the Soviet Union for West Germany and Israel, it did not take long for Western specialists to recognize the potential for Soviet studies. Between 1968 and 1984 (inclusive), approximately 265,000 persons left the Soviet Union with Israeli visas, and some 90,000 or so Soviet citizens of German extraction left for West Germany. Another 20,000 or so left under other auspices, including some Russian, Ukrainian and Baltic nationalities and more than 10,000 Armenians who came almost exclusively to the United States. As time passed, an increasing proportion of those who were initially slated for Israel decided, once they were out of the USSR, to come to the United States instead. By 1986, more than 100,000 had arrived in the United States, with 35,000 former Soviet citizens arriving in 1979 alone, the largest inflow of any year. Since 1979, the rate of immigration to this country has declined sharply, and in recent years has not exceeded 1000 per year.⁵

Development of a major research program on the order of the Harvard Project in this country faced a number of obstacles, not least of which was the difficulty of locating financial support. The Ford Foundation had recently lowered the priority of Soviet area studies. U.S. Government funds were also restricted by what was known as the "Kissinger rule," after the Secretary of State during the Nixon administration, who had established a personal

policy against the use of federal funds for academic or governmental studies of recent emigrants from the Soviet Union. (He was concerned, presumably, about potential adverse effects upon the migration itself as well as with possible repercussions upon U.S.-Israeli and U.S.-Soviet relations.)

The August 1979 meeting was called following a successful lobbying effort to revise the Kissinger rule, which had remained effective policy during the first three years of the Carter administration. Some form of government funding was considered essential because survey research on the scale anticipated is very expensive and requires assured long-term financing. The agenda focused on a series of obstacles that would have to be overcome and decisions that would have to be taken to get the project underway.

First, there was the question of methodology. The Harvard project had utilized a variety of methods, including life histories, expert testimony and a lengthy, closed, "paper and pencil questionnaire" administered to almost 3000 respondents. Feelings have run high ever since the Harvard project in the Soviet field, especially among political scientists, with respect to the validity of the various methods. Disagreement over the relative merits of quantitative and qualitative research and over various survey procedures was clearly evident at this first meeting. A related, subsidiary issue involved whether or not to employ the services of a professional survey research organization.

Second, there was the question of what disciplines to include in the research team. The principal investigators of the Harvard project included an anthropologist, a psychologist and a sociologist. Economics, political science and other disciplines such as history were represented either by graduate students, who served initially as interviewers and subsequently as analysts while developing dissertations with the data, or by senior consultants. In 1979, there were few anthropologists or social psychologists in the field and only a small number of trained sociologists. It was clear that political science and economics would play more significant roles in the current project. The Harvard study had relied primarily upon the faculty and graduate students associated with the Russian Research Center. It was presumed that the current project would be broadly based, drawing members from a variety of academic institutions.

Third, would it be possible to locate a reasonable sample? Compiling a list for the sample frame and locating of the sample would depend heavily upon cooperation from resettlement agencies. Moreover, because such a high proportion of the immigrants to this country were Jewish (by some definition), cooperation was also necessary from a variety of Jewish organizations that had become involved in the outmigration of Jews from the Soviet Union and in their absorption here or in Israel. And various emigre organizations were potentially important to the success of the project also.

Fourth, even with success in the development and location of a reasonable sample of recent Soviet emigrants, would they respond freely and candidly? There were many who believed that they would not, or that their innocence of survey research as Soviet citizens would make them poor subjects. There were others still who asserted that former Soviet citizens would, as respondents, fear penetration of the project by the KGB or by American intelligence agencies. It was obvious, therefore, that confidentiality would be a key factor.

Fifth, how was the project to be funded? It was understood that the federal government would be the principal funder and that the Department of Defense (DOD) would play a very substantial role in it. The meeting was assured "not to worry about what the sponsor was interested in." The sponsor was prepared "to trust academic judgement" regarding both methodology and substance. The general aim of the Office of Net Assessments in the Pentagon, which at that time represented the prime potential funder, was described as support for basic research into the "underlying factors and dynamics of contemporary Soviet society that will determine the future power and development of the USSR." This was a sufficiently broad and fundamental enough objective to pose no serious constraint upon academic formulation of the research agenda.

The real question was how to ensure that the profession, the emigrants themselves, resettlement workers and others whose cooperation was essential would perceive the project as an academic exercise and not as merely a front for official intelligence. The

Harvard project had been funded by the U.S. Air Force directly, but concerns about possible Soviet reaction to direct DOD funding for SIP and about possible adverse affects upon potential respondents made a search for alternatives desirable. The newly created National Council for Soviet and East European Research offered a promising vehicle for the provision of oversight for the project and as a buffer between the project and the ultimate government funders.⁶

Finally, what should the aims of the project be? It was agreed that, regardless of the source of funding, the research agenda should be determined by academics and that the aim should be basic rather than applied research on the Soviet social system. The most fundamental question was, however, what we could and should seek to learn from what was viewed by all of us as an extremely valuable "living archive" on contemporary Soviet society, but one that was at the same time badly flawed because unrepresentative of the USSR taken as a whole. It was also a highly perishable archive that needed utilization as soon as possible.

A design phase proposal was funded by the National Council for Soviet and East European Research in November, 1979. During the design stage of the study, more than one hundred scholars specializing in Soviet studies or in survey methodology participated in seminars on the ideal substance and survey methodology of such a project. The seminars were held all over the country during the first half of 1980 in an attempt to involve the maximum number of scholars in a variety of disciplines.⁷

Concentrated work on the topics that could and should be treated and on the various methods available to obtain reliable information on them was conducted at the University of Illinois during the summer of 1980. The written statements that were produced at that time later formed the basis for development of the General Survey questionnaire.

To a considerable extent the Research Team was self-selected, for it composed itself primarily of those scholars who participated the most actively in the feasibility-design seminars and who were also willing to commit themselves to a five-year project. Selection was constrained, of course, by the need to have various methodological and disciplinary skills represented and by the requirement that a variety of academic institutions be represented. The research team ultimately consisted of two economists, five political scientists, three sociologists and one Russian literature specialist. A number of other individual scholars also contributed questions and participated in questionnaire development during formulation of the General Survey protocol.

FEASIBILITY ISSUES

The two most critical issues governing feasibility were (1) whether or not we could identify and locate a sample worth interviewing, and (2) whether or not Soviet emigrants to this country would participate freely and candidly. The sample design our methodologists recommended called for maximizing analyzable heterogeneity within the sample and stratifying to

reduce anomalies produced by the constraints that shaped the migration of former Soviet citizens to this country. This meant that it was essential to develop a sample frame that would be as close to a census as possible of the most recent emigrants. It followed, therefore, that we would have to have the active cooperation of the various resettlement agencies in this country which had received, placed, and continued to keep contact with the sample we required. Use of U.S. Government official sources was, of course, out of the question.

We discovered that participation and candor hinged upon our ability to guarantee very strict confidentiality. Indeed, the most frequent reason given by emigrants who refused to be interviewed was the fear of adverse effect upon relatives still in the USSR and upon their chances of emigrating subsequently. In general, given assurances of confidentiality, most of our respondents were eager to participate precisely because they believed that they had valuable information on the Soviet system which was needed to correct American misimpressions, both official and unofficial, about life in the Soviet Union.

Very rigorous confidentiality procedures were worked out with the assistance of the National Opinion Research Center (NORC) of the University of Chicago. The system SIP used was derived from -- and more stringent than -- procedures that had previously been used in survey projects to protect the identities of persons who had been interviewed about serious criminal activities, such as drug dealing, where candid participation could expose the respondent to

felony criminal charges. In brief, the system involved use of a "Canadian link file" to separate name and address from case number and encryption of various case and interviewer "links." The face sheet and all materials conveying information that might identify the respondent were separated from the questionnaire in the presence of the respondent and placed in a separate envelope for immediate mailing to the Canadian link. The questionnaire was placed in another envelope addressed to NORC. These procedures, plus rigorous training of our interviewers about the significance of confidentiality measures, were successful in generating a response rate of almost 80 percent.

Once we were confident that we could achieve a satisfactorily high response rate, it was necessary to persuade the various resettlement agencies, Jewish organizations, various emigre groups and other interested parties that the very existence of an interview project of this magnitude would not -- in and of itself -- provide Soviet authorities with a pretext to terminate outmigration altogether. The historical record shows that the Jewish and German-Russian emigrations from the USSR had been tied to major foreign policy issues, particularly to international economic issues (Millar, 1985). On the individual level, Soviet authorities clearly exercise discretion over those who wish to leave. People whom they do not want "debriefed" by Western intelligence agencies or interviewed by the press or scholarly organizations are simply not allowed as individuals to emigrate. It was our best judgement, therefore, that SIP would not precipitate a change in Soviet policy, and most of those who were

experienced with the Jewish emigration from the USSR agreed. Subsequent events substantiated this view.

Although we were ready to begin work on the questionnaire by the end of the summer of 1980 and had established the feasibility of the project, political events in Washington, D.C. put the project on ice until the fall of 1981. The principal reason for the delay was the change in national administrations, which required persuading a new set of government officials of the desirability and feasibility of the project. Thus, it was not until September 1981, that the Soviet Interview Project got underway in earnest.

FUNDING

Fortunately, during the summer of 1981 an arrangement was made between the DOD, the CIA and the State Department, with the blessings of a number of other federal departments and agencies, to fund the Soviet Interview Project through the National Council for Soviet and East European Research. The National Council was charged with oversight and quality assurance for the project as it had been proposed June 20, 1980.

The contract specified three principal goals for the Soviet Interview Project. The first was to conduct a study of contemporary Soviet society based upon interviews with recent emigrants from the Soviet Union who now live in the United States. The second was to promote the involvement of young scholars and thus to serve as a means for development of the field of Soviet

studies. The third aim was to make the data and research products collected by SIP available to all interested scholars in the field simultaneously with the delivery of any and all research products delivered to the National Council and government sponsors.

The study as proposed in June 1980 called for two complementary types of interviews. One was to be a general survey of a relatively large sample of respondents, based upon a questionnaire that would be developed in advance and would, therefore, be as "closed-ended" as possible and amenable to statistical analysis. The other involved a set of "expert" or special knowledge interviews, each of which would involve a limited number of "informants" who would be able to report on the way certain institutions of Soviet society are organized and how they really work. Examples of the latter are enterprise managers, jurists and camp returnees. The studies that are reported in this volume pertain only to the SIP General Survey.

QUESTIONNAIRE DEVELOPMENT

Thus, in September 1981, after almost exactly a year's hiatus, the research team began drafting the questionnaire for the General Survey. Two aspects of this process proved particularly challenging. First, the team sought to develop a truly interdisciplinary questionnaire in which, for example, political scientists' questions would serve economists and vice versa. This was not merely a desirable goal, but a necessity because the number of questions that members of each discipline wanted to ask far exceeded the space available. The task was analogous to designing

the payload of a satellite. Each experiment must be compatible with all the rest, and only so many experiments can be accommodated on board. We were forced to share variables wherever possible, therefore, which meant "selling" one's own discipline's variables to other team members. Space in the questionnaire was not merely allotted to team members, who would be free to use the space as they saw fit. Rather, all questions were treated as though they belonged to everybody, a policy which generated considerable interdisciplinary give and take.

Just as challenging was the task of paring down the list of questions suggested by the various disciplinary subcommittees of the research team and their consultants -- a list which would have required interviews lasting more than a dozen hours instead of the targeted average length of three hours. Team members were obliged to write "passports" explaining the utility of each question, or set of questions, they wished to place in the questionnaire. Passports had to be quite specific, detailing the hypothesis to be tested, the relevant literature and the frequency distributions expected for each question, and they served as a basis for discussion and decision-making by the questionnaire "editing committee."

Technical assistance in developing the questionnaire was provided by NORC. NORC staff formatted questions in accordance with established survey principles and organized the questionnaire to facilitate the flow of questions and answers. In August and October of 1982, NORC conducted two English pretests of the

questionnaire with 54 English-speaking Soviet emigrants. After each pretest, the questionnaire was revised under the direction of the research team to take into account the reactions of respondents and the impressions of the NORC staff as to which questions were "not working." The pretests were also used to close as many open-ended questions as possible, because open-ended questions cost so much more to administer and process than do questions offering fixed response categories.

In keeping with standard practice, the questionnaire was written in English because that was to be the language of analysis. After a satisfactory English questionnaire was developed, it was translated into Russian by three recent Soviet emigrants. Translation was supervised and edited by Aaron Vinokur, a research team member who is himself a member of the Third Emigration.

The preliminary Russian questionnaire then underwent blind back-translation into English by an independent professional Russian-to-English translator (and who was himself a native speaker of English). Substantive, measurement and linguistic equivalences of the original English version and the back-translation were checked both by the NORC staff and by appropriate members of the research team. Substantive and measurement equivalences were treated as controlling where conflicts emerged with linguistic equivalence. Differences were resolved in November 1982, at a meeting of the translators, back-translator, the NORC staff, and the research team's special editing committee. The Russian questionnaire was pretested with twelve emigrants during the next

two months. Further corrections and refinements were introduced on the basis of these pretests.

THE CONTENT AND STRUCTURE OF THE QUESTIONNAIRE

The research team chose to focus on everyday life in the Soviet Union, not on emigrants' experiences in attempting to leave their homeland or on their adjustment to life in the United States. Emigration and absorption are interesting and worthy topics, and we would have liked to study them as well, but dealing with them seriously would have occupied valuable questionnaire space and thus detracted substantially from the team's ability to study many aspects of life in the USSR.

The Concept of the Last Normal Period of Life in the USSR

To insure that respondents would report on their normal pre-emigration lives, the team adopted a strategy initially employed by Gur Ofer and Aaron Vinokur in their research on Soviet emigrants in Israel: leading respondents to define and talk about their last period of normal life in the USSR (Ofer, Vinokur, and Bar-Chaim 1979). Since applying to emigrate usually brings marked changes in Soviet citizens' lives, respondents were asked to pinpoint the month and year in which they applied to emigrate. They were also asked whether plans to emigrate significantly changed their lives even before that date, and, if so, to specify the month and year in which their lives changed. The five years leading up to the earlier of these two dates was defined as the last normal period (abbreviated "LNP"), and the prior month was defined as the end of the last normal period ("end LNP").

Interviewers explained the terms and, in full view of respondents, clearly marked the LNP on the life-history charts which had been filled out using information from respondents. Interviewers were instructed to refer to the chart as often as necessary during the rest of the interview to make certain that respondents focused on the correct period when questions referred to the LNP.

The frequency distribution of respondents' LNPs reveals that 2,562 of the 2,793 respondents specified the end of their LNP between 1978 and 1981. Inasmuch as the vast majority of interviews took place in 1983, it follows that most respondents were asked to answer questions about events from two to five years prior to the interview (SIP General Survey Codebook, 1986).

The function of the LNP concept is revealed more fully in Table 1, which gives the temporal structure of the General Survey questionnaire. (Disregard the lower two sections of the table for the time being.) Note that the middle column pertains to the LNP. It shows that respondents were asked a wide range of questions about the LNP, from straightforward questions about their place of residence to subjective questions about job satisfaction and regime performance. As the left-hand column indicates, respondents were also asked to recall facts about the years leading up to their LNP. These questions developed a series of educational, marital, employment, migration, and military histories which allow analyses that escape the usual shortcomings of cross-sectional data. Finally, as the right-hand column shows, respondents were asked a few questions about their status at the time of the interview. For

the most part, these questions were raised to allow the team to test whether or not emigrants' status at the time of the interview might have affected their perceptions of the past.

-- Table 1 about here --

Table 1 reveals another important aspect of the questionnaire. Most questions pertained to the respondents' own lives, not to their households. Nevertheless, since household events were expected to bear on respondents' lives, questions about spouses and households were raised. As the lower part of the exhibit indicates, special attention was devoted to household fertility, migration, decision-making, and budgets.

Partitioning of the Questionnaire

To reduce the burden on respondents while retaining as many questions as possible, the research team decided to break interviews into two components -- a two-hour core to be administered to all respondents; and three one-hour supplements, each of which was randomly assigned to one-third of the respondents. This tack allowed the team to retain five hours of questions while demanding, on the average, only three hours from each respondent. The thematic, modular structure of the questionnaire is shown in Table 2. Note that the core contained biographical questions, as well as questions about employment, education, fertility, mobility, language and ethnicity, household structure, political participation, and opinion items. Each of the supplements, on the other hand, offered a more narrow range of

Table 1

Temporal Structure of the General Questionnaire

<u>Life History</u>	<u>Last Normal Period</u>	<u>At Interview</u>
RESPONDENT		
Migration	Residence	Residence
Education	Highest educational attainment	
Employment (unemployment) and military service	Employment Income/wealth	Employment Income
Evaluation of nationality policy and ethnic conflict	Nationality	Ethnic self-identification
Marriage, fertility	Marital status	
	Languages, religion Cultural preferences	Religion
Political participation	Political participation	
Evaluation of changing economic conditions	Economic/social status Job satisfaction Quality of life	
Evaluation of changing political and social freedoms	Evaluations: Regime and leaders Economic attainment Values	
SPOUSE		
Marriage and fertility	Marital status	Marital status
Migration	Nationality/ethnic self-identification	
Selected education history	Educational attainment Religion	
Job interruptions		Family roster
HOUSEHOLD		
Family migration history	Income/wealth Decision making	Income

related questions: one supplement focused on politics; another on socio-economic and demographic topics; and a third on a potpourri of topics such as leisure activities, media preferences, attitudes towards science and the like.

-- Table 2 about here --

Splitting the questionnaire in this way, of course, reduced the number of cases for questions in the supplements to about one-third of the sample each and rendered it impossible to calculate correlations between variables covered in different supplements. These disadvantages were minimized, however, by making certain that key control variables were covered in the core and by putting questions requiring a large number of cases in the core also. Furthermore, questions in the supplements were grouped by themes to maximize the probability that interesting correlates would appear in the same supplement, if not in the core.

RECRUITING AND TRAINING INTERVIEWERS

From the outset, it was clear that recruiting good interviewers would be uncommonly challenging: They would have to be fluent in Russian and able to administer a long, complex questionnaire in accordance with the demanding standards set by academic survey organizations. And they would also have to be willing to do the interviewing wherever the emigrants lived. Interviewers would have to be trained from scratch also because the language requirement precluded using NORC's pool of trained interviewers.

Table 2

Disciplinary Structure of the General Questionnaire

CORE (N=2,793)

Mod A: Biography, Parentage	Mod H: Household structure and Standard of living
Mod B: Education	Mod I: Bureaucratic encounters
Mod C: Early employment	Mod J: Opinions (e.g., sex role attitudes)
Mod D: Life history	Mod K: Spouse
Mod E: Fertility	Mod L: Institutional evaluations
Mod F: Emigration; LNP employment	Mod M: Military experience
Mod G: Language, Ethnicity, Religion	Mod N: Emigration and Current status

SUPPLEMENTS

GREEN (N=922)	ORANGE (N=926)	BLUE (N=933) ^a
Religious practices	Politics	Employment
Media	Crime	Income
Nationality	Foreign policy	Standard of living
Science views	Evaluations	Birth control
Leisure activities	Sex roles	Soviet census

^aThe sum of the Ns for the three supplements equals 12 less than the N for the core because 12 respondents did not complete a supplement.

The large population of Soviet emigrants presented itself as a potential source of interviewers, and some consultants argued for employing emigrants on grounds that they would be more likely to catch subtleties in answers given in Russian. Others, however, were concerned that respondents -- having spent their lives in the USSR avoiding sensitive topics with potential informers -- would not be candid with emigrant interviewers with whom they were unacquainted. Still others wondered whether emigrant interviewers could refrain entirely from imposing their views on responses they considered wrong. Taking all arguments into consideration, applications from emigrants were disallowed only for those who fell into the sample frame (that is, who had arrived in the United States after 1978). Applications from other qualified emigrants who were U.S. citizens were judged against the same standards as other applicants. All interviewers were obliged, of course, to have proficiency in the English language.

Applicants were evaluated on the basis of three criteria: 1) "interviewing personality," that is, the ability to establish rapport with respondents, to elicit responses without reflecting judgments, and to follow directions in questionnaires; 2) the knowledge of Russian (and of English, in the case of immigrant applicants); and 3) a proximity to areas in which respondents lived. Performance on the first criterion was evaluated by NORC's field managers using normal hiring procedures. The second was evaluated by means of two Russian language tests administered by the field managers and graded by faculty members at two participating universities.

On the basis of the screening process, 95 applicants were invited to the training sessions. Fifty-eight percent were women and 66 percent were under age 30. About one-quarter had earned, or were in the process of earning, doctorates; another quarter, master's degrees. The remainder all had bachelor's degrees. The language tests were highly successful in identifying the necessary level of language skills. Much to the delight of the research team, almost 90 percent had spent time in the USSR; 75 percent had spent four or more months in the USSR. Of the 26 who were foreign born, 13 had immigrated to the United States prior to 1952; 21, prior to 1967. Seventy-six percent of all applicants had majored in Russian or Russian area studies, and 61 percent held jobs which made direct use of such knowledge (SIP General Survey Codebook, 1986).

Those selected attended six-day training sessions which included NORC standard procedures and a program designed specifically to meet the needs of SIP. Extensive use of the Russian was emphasized.⁸

THE SAMPLE

Ideally, the questionnaire would have been administered to a probability sample of Soviet citizens. But even Soviet sociologists studying politically innocuous topics have seldom managed to administer surveys to a probability sample of the general population. Obviously, the SIP General Survey is based on a unique population: adults who have succeeded in emigrating from

the Soviet Union and settling in the United States. The implications of this fact were explored at length in the methodological sessions mentioned earlier. It became clear to all participants that formal statistical inference to the Soviet population would be unwarranted.

To state the point in more concrete terms: the frequency distributions presented in Sections 6 through 9 of the Soviet Interview Project General Survey Codebook cannot be taken as estimates of the frequency distributions which would be obtained from a probability sample of Soviet citizens. Simple-minded attempts to use the distributions in such a manner will be likely to yield misleading results. Extraordinary measures are necessary, therefore, to deal with problems of bias when it comes to the analysis of SIP General Survey data.

With this orientation, the team set out to enumerate all adult emigrants who had arrived between January 1, 1979 and April 30, 1982. These dates represented a compromise which took into account both the demand for very recent emigrants with fresh recollections and the demand for a large enough sample frame so that certain sparsely-populated categories of emigrants, such as those from Central Asia, could be studied as groups.

Fortunately, the vast majority of Soviet emigrants had found their way into American society through domestic resettlement agencies, and these agencies were persuaded by our stringent confidentiality procedures and by a dedication to education and

scholarly research to cooperate in the process of building a list and, subsequently, in locating the sample. NORC's staff was, therefore, able to build a list of 37,156 Soviet emigrants, of which 33,618 met the eligibility criteria: adults who arrived in the United States between the dates given above and who were between the ages of 21 and 70 inclusive at the time of arrival. An initial sample size of 3,750 was planned, with the expectation of an 80 percent response rate, or 3000 completed questionnaires. The effective sample turned out to be 3,551, with 2,793 completed interviews, for a response rate of 79 percent.⁹

A more detailed description of the General Survey sample is provided by Barbara A. Anderson and Brian D. Silver in Appendix A.

FIELD WORK

Well before interviewing commenced, NORC began locating members of the sample. Working from each person's last known address, NORC utilized all standard procedures to establish a current address. As part of this process, a letter (in Russian and in English) was sent to all members of the sample informing them of their selection. In some cases, the resettlement agency took letters supplied by NORC and, at NORC's expense, had its own staff supply addresses and mail letters without divulging the addresses to NORC.

Interviewing began in March, 1983. The work of each interviewer was checked after two interviews; any errors in procedures were brought to their attention before they were allowed

to proceed. Thereafter, each tenth interview underwent a quality check.

An important feature of NORC's field procedures was its policy in handling multiple respondents in households in such a way that respondents could not discuss the interviews of other household members before they were themselves interviewed. In most survey research, this does not present a problem because the selection rate is so low that two respondents from the same household are rarely chosen. However, since this survey selected 3,750 people from a sample frame of 33,618 and because of certain stratification constraints, the problem was fairly common. NORC's policy was to arrange either simultaneous or consecutive interviews.

By August 27, a total of 2,408 interviews had been conducted, yielding a response of 65 percent. As would be expected in a survey of this sort, NORC found itself facing problems in achieving the targeted 80 percent response rate. An unusual number of respondents were difficult to locate by virtue of their relatively high geographic mobility as recent immigrants. Many also initially declined to participate because 1) they were concerned for the safety of relatives in the USSR, 2) they did not want to dredge up painful memories, and 3) they feared that they knew too little to discuss worldly issues. Several sorts of remedial action were taken to raise the response rate. Interviewers were trained in converting "soft" refusals and in field locating, and resettlement agencies were asked to verify for respondents that reliable and effective confidentiality and security measures were being taken on

their behalf by NORC. In addition, arrangements were made to use other languages in interviewing ten people who did not know Russian.

By January 31, 1984, a total of 2,824 interviews had been conducted. Of these, 31 were discarded for one of two reasons: 1) the interviewers reported that, despite their best efforts, another person in the room where the interview was conducted answered most of the questions; or 2) the person was incompetent for purposes of interviewing (senile or deaf, for example). These cases were discarded, of course, without regard to the opinions the respondents had expressed.

CONFIDENTIALITY

Confidentiality is virtually always a concern in survey research; it has been a special concern in this project. Many respondents, fearing for relatives in the USSR or for their own well-being, requested assurance that confidentiality would be maintained. Some even sought and received assurance from their resettlement agencies. The research team is strongly committed to maintaining confidentiality, and it has taken steps to ensure confidentiality not only to protect SIP respondents against possible Soviet intrusion, but also to protect them against possible intrusion by federal, state or local authorities in this country.

As with all survey research conducted under the aegis of universities, all aspects of this project have been reviewed by a "human subjects committee"--in this case, the Institutional Review Board of the University of Illinois at Urbana-Champaign. The research team is bound by measures agreed upon in negotiations with that committee.

The research team has taken extraordinary measures to maintain confidentiality. The use of a Canadian link file has already been described above. Among the other measures are: 1) all team members, assistants, coders, interviewers, and NORC staff members have signed confidentiality pledges; 2) the link between names and data will ultimately be destroyed, and no list of participants will ever be made available; 3) in keeping with standard survey practice, answers have been aggregated when they might uniquely identify respondents. Special care has been taken to aggregate answers when the questions pertained to matters which might be documented in the USSR or the United States (such as dates, unusual occupations, some locations).

It is encouraging that not a single respondent has complained during or since being interviewed about the conduct of SIP interviewers or about any failure to maintain the highest degree of confidentiality and professionalism.

THE PROBLEM OF BIAS

The SIP sample obviously was not a random, probability sample of the general population of the Soviet Union. In addition, our respondents voted with their feet and have faced the trauma of relocation in the United States. Any bias raises a question about the reliability and generalizability of survey results. Given the potential sources of bias in any survey -- such as sampling errors, faulty recall, a desire to please the interviewer and the refusal to participate or to answer questions considered sensitive or confidential, and given that the SIP survey offered more opportunities for bias than most surveys, the reliability and useability of our data and findings are critical issues.

It should perhaps be stressed at the outset, however, that the problem of bias in the SIP General Survey is shared by any attempt to use recent Soviet emigrants as sources of information about their lives in the mother country. The hard facts remain for all who seek to use this source of information that the individuals being interviewed are, with few exceptions, self-selected, that they have been exposed to life outside the Soviet Union for an extended period, that they are required to recall their past, and that some degree of risk is perceived to attach to complete candor.

Survey research offers no sure method as proof against bias in such cases. Although the nature, type and risk of bias differ for different methods of interviewing recent Soviet emigrants, none is bias free, and this includes conversing with a Soviet emigrant colleague over brandy. It is obvious, however, that students of

contemporary Soviet life cannot refuse to exploit this source. It is simply too valuable, and there is no alternative. It is not clear, in fact, that a survey conducted in the USSR on topics that involved political issues would be answered candidly even if a representative sample could be interviewed. The only question is how best to use emigrant respondents and what safeguards to employ.

Self-selection (emigration) bias:

Because a very high proportion of the members of the sample frame elected to leave the Soviet Union voluntarily, it is generally assumed on first consideration that our respondents would be uniformly hostile to the Soviet social system. Members of the research team and most others who have had extensive contact with this emigration have learned, however, that the stereotype of emigrants as Soviet dissidents is wrong. Although a small proportion certainly do count themselves as dissidents, the emigrants taken as a whole have left their homeland for a variety of reasons, with only a minority reporting ideological motives.

When asked an open-ended question, for example, about why they emigrated, 923 respondents volunteered that they emigrated because other family members were emigrating. Counting multiple answers, the reasons most often cited were family or friends - 48 percent; "religious" or ethnic - 46 percent; political - 43 percent; and economic - 27 percent. Thus, "political" reasons did not predominate as the motive to emigrate. Moreover, only a tiny fraction of our respondents indicated that they had ever participated in any kind of overt unconventional political activity

during the last normal period of their lives in the Soviet Union. Only 20 percent, for example, reported having attended an unofficial art show. Participation in more politically sensitive activities, such as job actions or public protests, was reported by less than 2 percent of the respondents, and the fraction reporting that they had been "activists" in any unconventional activity was well under 1 percent.

The point is that the former Soviet citizens who have migrated to the United States are neither uniformly hostile to the Soviet system nor are they a homogeneous population. A principal purpose of stratification of the sample was, in fact, to maximize heterogeneity precisely because our main interest is in differences among diverse groups within the sample.

Moreover, most emigrants seemed to exercise considerable objectivity in assessing their experiences in the Soviet Union. They were quite willing to list ways in which the United States could learn from the Soviet Union, and even the 18 percent who stated that the U.S. could "learn nothing" revealed in response to questions elsewhere in the questionnaire that a substantial proportion had no quarrel with such fundamental institutions of Soviet society as state ownership of the means of production or public provision of medical care. Respondents were also quite willing to list ways in which they were disappointed with life in the United States. Because the variation in respondents' reasons for emigrating was measured, analysts can determine which questions were most susceptible to bias correlated with emigration. An

extensive test of response effects has also been conducted by the SIP Data Management Center (DMC). The results suggest minimal problems on these dimensions.¹⁰

Bias as a limit:

Where the direction of the bias is known *a priori*, the frequencies obtained can be useful in setting conservative limits on the distributions that would be found in the USSR itself. Given, for example, that less than 30 percent of respondents reported ever having read *samizdat* (illegal, underground literature) during their last normal period in the Soviet Union (indeed, some respondents had to request definitions of the word), it is easy to believe that even less of the general population had read any forbidden material during those years.

Ethnic bias:

Being "Jewish" has offered the best ticket out of the Soviet Union since 1970 for emigrants likely to come to the United States. Thus, ethnic bias is, for all intents and purposes, a principal manifestation of self-selection bias. Bias matters, of course, only when it affects the questions one wants answered. Where an ethnic bias could be established in advance, such as in the consumption of alcohol, which is cross-nationally relatively low for Jewish communities, potential ethnic bias was avoided by avoiding the question. In this instance, respondents were used exclusively as "observers" of the effects, for example, of alcohol consumption in the workplace. Stratification and weighting of the

sample also was used to reduce the bias toward, for example, higher education in a "mostly Jewish" sample.

Where one can not be sure of the existence or direction of ethnic bias, it is necessary to test for it. Team member Donna Bahry has shown that ethnic bias is selective and can ordinarily be identified. In the SIP General Survey it clearly comes into play on issues related to ethnicity or nationality policy, but not systematically on general social, economic or political questions (Bahry, 1985).

Professor Bahry divided the respondents to the General Survey into five categories. The majority (2,137) fell into the category labelled "intense identifiers," defined as "those who saw themselves as Jewish only, and who felt that they belonged to no other nationality."

The other categories included "moderate identifiers" (262), "who saw themselves both as Jewish and as belonging to one or more other nationalities of the USSR." A third category represents "non-identifiers" (66), "individuals whose parent(s) was Jewish but who claimed another nationality" exclusively. "Spouses" (183), "non-Jewish respondents married to a Jewish spouse in the USSR," composed the fourth category, and the fifth and last category, "other," consisted most of the nationality Russian.

Bahry discovered that the responses of these five groups on questions related to ethnicity or nationality differ in significant

ways that reflect ethnic bias. Answers to more general questions, however, revealed little or no variation by category. When asked, for example, whether they would desire to have a relative seek a Jewish spouse, the more intense the respondent's self-identification as Jewish, the more likely the response would be in the affirmative.

Similar significant gradations in responses are found in the respondents' answers to other questions dealing with ethnicity or nationality, such as their opinions about the role of ethnic discrimination in access to education or in job advancement. When asked, however, whether agricultural or medical care should be private, there was no significant variation by ethnic category. All categories of respondents were heavily in favor of private agriculture. And all categories favored public provision of medical care just as strongly. There is no significant variation in either instance by category of respondent.

Thus, although the SIP General Survey is clearly subject to ethnic bias, the questionnaire was designed so that investigators would be able to test for bias that could not be eliminated on *a priori* grounds.

Memory Decay, Contamination and Interviewer Effects:

As was indicated earlier, 2,562 of the 2,793 respondents on the SIP General Survey defined the end of their LNPs as falling between 1978 and 1981. As almost all interviews took place in 1983, most respondents were answering questions about events or attitudes that

had occurred two to five years earlier. Evidence that they were in fact able to respond with considerable reliability has been adduced by research team members Barbara A. Anderson and Brian D. Silver (1986a).

Largely because the sample design called for maximizing the number of non-Jews drawn, the sample included 192 cases of related individuals who had shared the same household both during their last normal periods of life in the USSR and at the time interviews were undertaken in this country. Most of these individuals were interviewed separately and simultaneously (or consecutively), which has allowed Professors Anderson and Silver to evaluate the impact of memory decay and contamination.

The results have been quite encouraging. Anderson and Silver found a very high degree of agreement on such objective questions about life in the USSR as square meters of living space in their residence, household wealth, monthly household expenditures in total and in composition, spouse's monthly income from main job, and the like.

Interestingly, spouses' responses to subjective questions were also strikingly similar. Where one spouse reported satisfaction with housing in the LNP in the Soviet Union, the probability was very high that the other would report a similar degree of satisfaction. Moreover, the answers provided by married couples about satisfaction with housing, jobs, medical care, and consumer goods are closely correlated without regard to whether the pairs

were interviewed separately and simultaneously, separately at different times, or whether there were others present at the time of the interview.

Stratification and the "Referent Population":

The General Survey is based upon a stratified random sample. Stratification was based upon characteristics of members of the sample frame while Soviet citizens. The criteria used to stratify the sample were educational attainment, nationality, size of city and region from which they emigrated. Limits on the characteristics offered by the sample frame limited the referent population to the European population of large and medium sized cities of the Soviet Union (Anderson and Silver, 1986b). The desire to analyze major life events led the team to restrict the sample frame to adults, defined as persons who were between 21 and 70 years of age at time of arrival in the United States. To minimize memory decay and contamination, the sample frame was restricted to the most recent emigrants, those who arrived between January 1, 1979 and March 30, 1982. (For more detail, see Anderson and Silver Appendix A.)

Limitation of the referent population to "adult Europeans from large and medium sized cities of the USSR" is not sufficient to assure the validity of generalizations. And this holds for weighted results as well. As Anderson and Silver state: "it is...important to establish that survey respondents with specific socio-demographic backgrounds are similar to persons with the same background who did not emigrate from the USSR, or who were not

Jewish." Although far from complete, there are Soviet data that can be used for comparison with the distributions being analyzed by SIP team members.

Consider, for example, the economic data developed by team member Paul Gregory in an analysis of the earnings of Soviet workers (Gregory and Kohlhasse, 1986). He found "striking similarities between the SIP sample means and referent population means of economic and demographic variables... not used to stratify the sample." The official figure for square meters of urban housing space per capita for the 1978 urban population is 12.9. The SIP sample for approximately the same date is 13.5. Hours worked per week is given officially as 40.6, and for the SIP sample it is 40.0. Family size respectively is 3.2 and 3.4. Finally, the percent employed of the SIP sample is 69.5, while it was 71.0 percent in 1979 according to official figures. Where this kind of correspondence is found for aggregates or means, one can have considerable confidence in the finer breakdowns that SIP data permit, breakdowns that are not available in any form in Soviet official publications.

Again quoting from the Anderson and Silver appendix: "The concept of a referent Soviet population is relevant not because it represents an exact population from which the sample is drawn and against which the sampling error can be determined in precise statistical terms. Rather, it is important because it provides a referent sector of Soviet society whose experiences and behavior the SIP General Survey respondents are most likely to represent."

Analysis of the Data

The SIP study is expected to be useful primarily in examining multivariate relationships. In other words, the point of the study is not to describe the univariate distributions of, say, income, education, and political conservatism. These distributions are very likely unrepresentative of Soviet reality. The point instead is to explore the relationship between such variables under the kinds of controls all too seldom employed in Soviet studies. Are, for example, the monetary returns to higher education less for women than for men, as is the case in most of the world? Is political conservatism inversely correlated with education attainment? What accounts for the fact that women earn less than men? Note that such relationships may well be properly reflected in a survey of Soviet emigrants even though univariate distributions are skewed.

Regrettably, until Soviet social scientists administer questionnaires to a probability sample in an environment conducive to frank responses, Soviet and Western social scientists alike will have to settle for less certainty and more cautions than are considered normal or desirable in Western research. For the time being, if the findings of the SIP General Survey are used prudently as pieces of a puzzle to be put into the context of related Soviet findings and first-hand experiences in the USSR, they can substantially fill out our picture of everyday life in the USSR.

FIRST FINDINGS

The essays that compose this volume represent first findings of the SIP General Survey. Much remains to be analyzed, and subsequent analyses will be published in various formats, depending upon the author. Only after the data have been more thoroughly analyzed will it be possible to produce a truly synthetic overview of the results. Even so, the essays collected here point to a number of general findings about the dynamics of the contemporary Soviet social system.

At the most general level the General Survey raises a perennial issue in Soviet studies: Is the Soviet socialist system fundamentally different from the industrial and post-industrial societies of the West? Does it represent a different genus of social, political and economic system? Or is it instead merely a different specie of the Western systems that we know much more about because they are more open societies? This issue has troubled Western social science from the origins of Soviet studies. At stake is whether standard tools of analysis of the various social science disciplines are appropriate for study of Soviet society. If not, new and quite different methods would have to be applied in its analysis.

SYSTEMIC SIMILARITIES AND DIFFERENCES

The SIP General Survey protocol was designed on the hypothesis that the Soviet social system is amenable to analysis with standard Western disciplinary tools. The assumption was that the obstacle to standard disciplinary analysis has been the absence of data, not

the intractability of the system to standard types of analyses.

The SIP General Survey constitutes, therefore, a test of this hypothesis. Nonsense results, or routinely extreme values for the variables, would constitute falsification, other things equal. The essays collected here demonstrate unequivocally that Soviet society differs in quite specific ways from other societies, but that the differences are in degree rather than in kind. This is, perhaps, our most fundamental finding.

Max Weber's explanation of class, or social stratification, as a function of wealth, power and prestige, for example, seems to offer a better explanation of actual prestige rankings in the Soviet Union than does Karl Marx's analysis, which viewed social class as derived from the relationship to the means of production. What is more, despite heavy advertising for the dignity of manual labor and championing the blue-collar worker, members of the working class do not fare better in prestige ranking than in the West. Status is conferred instead on the basis of attainments such as occupational level, party membership and education, with the highest status ascribed to lawyers, doctors, writers, professors, engineers and army officers, in that order.

Similarly, the distribution of income and wealth in the Soviet socialist system may be more equal than in most Western mixed economies, but the difference is not radical. It appears more as a moderate outlier than as an observation associated with a different distribution. The distribution fluctuates also, as it does elsewhere, according to social policy. Poverty is still

widespread, and the data indicate a trend toward the feminization of poverty in the USSR, much as has been noted in the United States and in other mixed economies.

Members of the research team are frequently asked what our most surprising findings are. There have been some surprising findings, such as the relatively high degree of satisfaction with housing that two-thirds of our respondents reported for their last period of normal life in the USSR, or the differential impact of unconventional behavior on white and blue collar workers. In general, however, our aggregate findings confirm theories or predictions that some scholar somewhere in the West or East has offered at some time. This is not unexpected given the intensity with which Soviet society has been studied in the West over the last three decades. As Joseph Berliner put it at a conference at Airlie House, reviewing SIP first findings, if there were to be major "surprises" in SIP's findings, Soviet specialists in this country "ought to be fired." Confirmation of results or discrimination among hypotheses put forward by other methods and using other sources is no mean feat even if it were the only result of SIP.

Fortunately, it is not. Perhaps the single most significant "surprising" finding at the macrolevel that emerges from the General Survey is what appears to be a transformation in the structure of support for the Soviet regime since the Harvard project. Harvard interviewers found the young and well-educated to be the most supportive, relatively, of the Soviet system. The

older and less well educated were by far the more critical. Those who had benefited the most from the Bolshevik revolution were, therefore, the least alienated of the refugees interviewed (Inkeles and Bauer, 1959). The SIP General Survey has yielded exactly the opposite result, for the younger, more educated members of the sample are the most alienated from some of the fundamental characteristics of the system. They are much less likely to have been satisfied with the quality of their lives, and they are more likely to have been critical of the system's economic performance during their LNP. This was true despite the fact that, by their own admission, the younger and better educated were disproportionately reaping the material benefits of Soviet socialist society in the 1970s.

Where SIP findings are most generally surprising, however, is along dimensions about which we have had little or no information whatever, as, for example, at the microlevel of Soviet society. It has been essentially impossible to analyze the impact of gender, generation, education, income, class, unconventional behavior, size of city, and so forth, upon behavior and attitudes in Soviet society because of the absence of sufficient well-defined data in adequate detail. As one reviews the essays that follow, several factors stand out as crucial for an understanding of the structure and dynamics of contemporary Soviet society. Most significant at this stage appear to be generation, educational attainment, material incentives and political conventionality.

THE GENERATIONAL FACTOR

SIP findings indicate clearly that there are significant elements of regime support among the older generation, among blue collar workers and the less educated. The strength and direction of generational differences may be the single most significant finding to date. Generational differences surface in almost all analyses, and the differences being found are true generational differences and not merely life-cycle effects. The older generation is unforgiving of Stalinism and correspondingly more forgiving of contemporary problems. Thus, the older generation regards Stalin's era as the "worst" and Khrushchev's as the best, with the Breshnev period somewhere in between. The young agree that Khrushchev's era was the best, but they regard Breshnev's as the worst. They are completely unimpressed, it would appear, with the economic progress that has been achieved since Stalin and impatient with the economic slow-down of the late 1970s. The generational factor offers, then, a challenge for Soviet leadership and one that is likely to increase over time.

The General Survey reveals relatively higher rates of criticism among the young at all educational levels. Significantly, as their educational attainment increases, the young tended to become more critical and more inclined toward unconventional activities. The pattern that emerges is that the young, much more so than those who are older, judge the regime on the basis of its current performance. They are generally more critical and less inclined to accept present conditions just because they are an improvement over the past.

The older generation, which experienced one or more of the many traumatic events in Soviet history, is apparently more philosophical about current failings of the Soviet economy today. After all, taken as a whole, the years since Stalin have been peaceful and relatively prosperous also. The young and successful are clearly less philosophical about the recent stagnation of the economy. They may also be victims of the rewriting of Soviet history. Having never experienced Stalinism, and having been taught only a sanitized version of the Stalin era, the realities of Stalinism carry much less weight with them than with the older members of Soviet society. Thus it is that if there are neo-Stalinists today, they are among the young.

THE EDUCATIONAL FACTOR

Perhaps as important as the generational factor is the educational factor. The General Survey reveals an unambiguous and negative relationship between the level of educational attainment and the level of support for various political and economic institutions of the Soviet system, other things equal. The level of support for state control and management of major sectors of the system declines with each increase in the level of education attained, and this is true even for attainments in primary and secondary school. The same pattern is evident in responses to questions that juxtapose individual rights against the power of the state, such as the provision of civil liberties. As education increases, support for state power relative to individual rights decreases.

This is not to suggest that material rewards do not matter, for they do. Other things equal, support for regime values and for the institutional structure of the Soviet social system increase with increases in material rewards. The problem, however, is that material benefits do not keep pace. As the young are also relatively speaking the best educated, generational and education effects reinforce one another. Hence the significance of providing adequate material rewards to education and hard work. Hence also the importance of getting the Soviet economy moving again. This conclusion is underscored by the fact that workers on the shop floor indict the system of material incentives in explanation for the poor productivity performance of Soviet industry. Widespread "time theft" from employment supports this conclusion also.

THE PARTICIPATION FACTOR

It is equally significant to note that the fact that SIP respondents endorsed strongly some key features of the Soviet system while sharply criticizing others enhances confidence in their candor and in the reliability of the survey's findings generally. Even those who were extremely hostile to the regime (judging from their responses to other questions on the survey) did not reject everything about the system. Those who believed, for example, that "the U.S. can learn nothing from the USSR" still strongly favored, for example, state-provided medical care (48 percent), and nearly three out of ten reported that they favored state ownership of heavy industry.

Ironically, the young, successful generation reported itself as the most highly "mobilized" of any generation ever in the formal sense of the word. They reported belonging to the correct social and political organizations, and they participated at higher rates than did less successful and less well-educated members of their cohort. Yet this same group of the "best and the brightest" also was the most likely to be involved in "unconventional" behavior -- refusing to vote, listening to BBC and other foreign broadcasts, reading and distributing *samizdat*, reading foreign fiction and nonfiction and participating in other unsanctioned activities.

There is also evidence to suggest that a gradual "privatization" of personal life has been taking place since Stalin. The use of "blat," that is, connections and influence, to avoid undesirable activities such as military service or to obtain advantageous choices, such as a good job, has increased steadily and significantly over time. A long term trend toward privatization is evident, which shows up not only in the evasion of mobilization efforts by state agencies, but also in the economic realm. The study reaffirms the pervasiveness of illegal as well as legal private economic activity.

The early findings of the Soviet Interview Project suggest that there is a strategy the Soviet leadership might develop to regenerate and strengthen popular support. Because support is weakest among the best educated and the young, it follows that educational opportunity could be manipulated to constrain educational attainment more closely to employment possibilities. Greater effort would need to be made to validate the differentiation of incomes - that is, goods and services would have to be made available to those who have worked hardest to earn higher incomes. And the young would need to be cultivated especially intensively -- partly by linking the current regime to the progressive aspects of the Khrushchev period. This would have to be done, of course, without calling up memories of Khrushchev's often boorish public behavior. Pressures for economic progress, for access to Western culture, for "private," quiet lives, and, thus, for reform, are therefore likely to grow as the "best and brightest" of the young generation replace generations with indelible memories of Stalin and his time.

FUTURE RESEARCH

The Soviet Interview Project has recently launched three additional projects. One involves recoding available materials from the Harvard Project. A second involves systematic interviews with a probability sample of Soviet emigrants who have arrived in the United States since the first General Survey was conducted, that is, since May 1982. The purpose of the second General Survey

is to investigate change over time in contemporary Soviet society. The second survey will also permit the clarification and amplification of certain findings of the first. The second survey is shorter and the questionnaire is not partitioned. With few exceptions, questions are stated exactly as they were in the first survey.

The third survey being fielded is devoted to an investigation of the Soviet military and focuses upon the "human face" of the Soviet military system and upon a comparison of civilian and military sectors of the Soviet social system. The instrument is being administered to a probability sample drawn from the sample frame from which the first General Survey was drawn.

Additional publications on the SIP General Survey I and reports on these new initiatives will appear in the future, and the data and associated materials will be placed in the public domain for the benefit of all serious scholars in the field. In planning the Soviet Interview Project, we discovered to our great disappointment that the Harvard Project data cards had been lost.¹¹ We decided that every effort should be made to ensure that SIP materials are properly archived for the benefit of current and future scholars. We have even made an effort to recover what we could from the Harvard Project. All of these materials will be carefully archived both at the University of Illinois at Urbana-Champaign and, where appropriate, with the Inter-university Consortium for Political and Social Research.

Footnotes

1. The team for the General Survey consisted of James R. Millar, Project Director, University of Illinois at Urbana-Champaign; Barbara A. Anderson, University of Michigan; Donna Bahry, New York University; John Garrard, University of Arizona; Paul R. Gregory, University of Houston-University Park; Rasma Karklins, University of Illinois at Chicago; Norman Nie, University of Chicago; Brian D. Silver, Michigan State University; Michael Swafford, Vanderbilt University; William Zimmerman, University of Michigan; Aaron Vinokur, University of Haifa; Linda Lubrano, Senior Research Associate, The American University; Marjorie Balzer, Senior Research Associate, Columbia University.
2. The data set is scheduled to be deposited December 31, 1986, with the Inter-university Consortium for Political and Social Research, Institute for Social Research, P.O. Box 1248, Ann Arbor, MI 48106. The tape has 2,793 records, one for each respondent, and each record contains 1,446 variables. The tape also contains an SPSS-X export file.
3. Attendees included: James R. Millar, University of Illinois at Urbana-Champaign; Jeremy Azrael, University of Chicago; Paul Cook, Department of State; Alex Dallin, Stanford University; Maurice Friedberg, University of Illinois at Urbana-Champaign; Fred Giessler, Office of Net Assessments, Department of Defense; Gregory Grossman, University of California at

Berkeley; William Manthorpe, Office of Net Assessments,
Department of Defense; Norman Nie, University of Chicago;
Vladimir Toumanoff, National Council for Soviet and East
European Research; William Zimmerman, University of Michigan;
S. Frederick Starr, Kennan Institute.

4. Some of the interviews were conducted in New York City too.
See Alex Inkeles and Raymond A. Bauer, Part 1 (1959), for a
more detailed description of the Harvard Project.
5. Sources of data: telephone communication with the staff of the
Conference on Soviet Jewry, New York City, and unclassified
figures from U.S. Department of State (courtesy: Paul Cook).
6. The National Council for Soviet and East European Research was
founded in 1978 by the presidents of twelve institutions: the
University of California-Berkeley, University of Chicago,
Columbia University, Duke University, Harvard University,
University of Illinois, Indiana University, University of
Michigan, University of Pennsylvania, Stanford University, the
American Association for the Advancement of Soviet Studies, and
the Kennan Institute.
7. For a list of attendees, see Exhibit 3-A of the Soviet
Interview Project General Survey Codebook, 1986.
8. For a description of the training program, see W. Sherman
Edwards, May 1983.

9. The number of valid completed interviews was 2,793. When the sample size ($N=3,738$) is lowered to take into account 187 members who were deceased or out of scope, the calculated response rate is .79 [that is, $2,793/(3,738-187)$].
10. Soviet Interview Project Data Management Center, Vanderbilt University, under the direction of Professor Michael Swafford.
11. For a description of what materials remain of the Harvard Project, see Marjorie Balzer, August 1980.

Bibliography

- Anderson, Barbara A. and Brian D. Silver. 1986a. "The Validity of Survey Responses: Insights from Interviews of Multiple Respondents in a Household in a Survey of Soviet Emigrants." Soviet Interview Project Working Paper #14, University of Illinois at Urbana-Champaign.
- Anderson, Barbara A. and Brian D. Silver. 1986b. "Descriptive Statistics for the Sampling Frame Population: The Eligible Population for the Soviet Interview Project General Survey." Soviet Interview Project Working Paper #2, University of Illinois at Urbana-Champaign.
- Bahry, Donna. October 27, 1985. Oral Presentation, Soviet Interview Project Report to Sponsors, Airlie House, Airlie, VA.
- Balzer, Marjorie. 1980. "Guide to Materials for the Project on the Soviet Social System (Harvard Project/Soviet Refugee Interview and Questionnaire Data, 1950-53)." Soviet Interview Project Working Paper #1, University of Illinois at Urbana-Champaign.
- Edwards, W. Sherman. 1983. "Interviewer Training for the Soviet Interview Project General Survey." Soviet Interview Project Working Paper #3, University of Illinois at Urbana-Champaign.
- Gregory, Paul R. and Janet Kohlase. 1986. "The Earnings of Soviet Workers: Human Capital, Loyalty and Privilege." Soviet Interview Project Working Paper #13, University of Illinois at Urbana-Champaign.
- Inkeles, Alex and Raymond A. Bauer. 1959. The Soviet Citizen. Cambridge: Harvard University Press.
- Millar, James R. 1985. "The Impact of Trade Interruption and Trade Denial on the U.S. Economy," in Bruce Parrott (ed.), Trade, Technology, and Soviet-American Relations. Bloomington: Indiana University Press, pp. 324-50.
- Ofer, Gur, Aaron Vinokur and Yechiel Bar-Chaim. 1979. "Family Budget Survey of Soviet Emigrants in the Soviet Union." Rand Paper P-6015. Santa Monica: Rand Corporation.
- The Soviet Interview Project General Survey Codebook, University of Illinois at Urbana-Champaign, 1986.

Chapter Two

Quality of Life: Subjective Measures of Relative Satisfaction

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Revised 2/12/86

QUALITY OF LIFE: SUBJECTIVE MEASURES OF RELATIVE SATISFACTION

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SUMMARY

Quality of life is necessarily a composite of many variables or domains. One domain such as health may occasionally dominate all others, but ordinarily a number of domains will jointly impinge upon one another to determine the overall quality of life. This paper examines the personal recollection by recent Soviet emigrants of their satisfaction in five major domains: availability of material goods, medical care, housing, employment, and a composite standard of living.

A major focus is on the influence of demographic variables upon perceptions of satisfaction. Younger people, for example, report themselves as having been less satisfied than do older people. This finding contrasts with the results of surveys conducted in Western Europe, where younger people tend to be more satisfied than older people. Great Britain and the United States, however, are notable exceptions.

The highest level of satisfaction reported by the emigrants was with their jobs. Younger people were most satisfied with their working environment. The reasons that they give challenge some commonly held perceptions in the West about the Soviet workplace.

The lowest level of satisfaction reported in the survey comes from the unavailability of material goods. Dissatisfaction was particularly strong among professional groups that had attained the most education.

Peoples' satisfaction with their lives in the Soviet Union can also be differentiated by the role that they played in deciding to emigrate,

by whether they themselves made the decision or followed the decision of someone else. Relating perceived satisfaction to a respondent's role in emigration sheds some insight into the extrapolation of survey results to the Soviet urban population at large.

QUALITY OF LIFE: SUBJECTIVE MEASURES OF RELATIVE SATISFACTION

In both the United States and Europe, people's subjective perception of life's overall quality is not wholly reflected by their objective conditions: riches do not necessarily bring satisfaction, nor are the poor always dissatisfied. In this paper, we explore the recollections of recent Soviet emigrants about how satisfied they felt about their lives in the Soviet Union. We then identify the groups among whom satisfaction levels differed significantly.

The first goal is to discover how Soviet emigrants rated the quality of their lives in the Soviet Union during their last normal period of life in the Soviet Union (LNP).¹ The data sought are the individual respondents' own assessments of the quality of their lives. The respondents' answers had a normative reference that is unique in Soviet studies, for it was the individuals' own expectations, values, and experiences that shaped their judgements. In order to minimize psychological weighting, they were asked to evaluate not Soviet society in general but their own life events.

Quality of life differs, of course, among different people. It also varies over time in an individual's life. There is a difference to be noted between an index of "happiness (or misery)," which assesses a momentary, fleeting state of one's feelings, and an index of satisfaction (or dissatisfaction), where reality is judged more soberly against one's expectations.² It would be impossible to obtain a reliable index of happiness from Soviet emigrants because so much time has elapsed since the respondents' lived in the Soviet Union. Results based on an index of satisfaction, however, are more reliable because the elapsed time and new environment actually enhance judgemental reflection and contribute to validity.

As people evaluate the overall quality of their lives, they are aware that some aspects of it are more satisfactory than others and that not all aspects are weighted equally. In this paper we use an operational concept of quality of life that separates the respondents' satisfaction to the domains of job, housing, goods, and medical care, plus a summary measure of satisfaction, the standard of living. When analyzed by factor analysis, the domains were strongly associated with one another, except for job satisfaction. The association between job satisfaction and other domains of life satisfaction has also been weak in U.S. data, although it is somewhat stronger in European data.³

Just as respondents differed in the satisfaction that they experienced in different domains, they also differed among each other. In order to differentiate between the more and less satisfied groups of Soviet society, we consider differences between groups in the community with different demographic characteristics. Men who were married when they lived in the Soviet Union, for example, were more satisfied with their lives than divorced men, which indicates that marital status contributed somehow to overall satisfaction. Other demographic variables we shall consider are sex, income, age, and education.

Standard of Living

To discover how Soviet emigrants felt about the overall quality of their lives in the Soviet Union, we asked them "How satisfied (udovletvoreny) or dissatisfied (ne udovletvoreny) were you with your standard of living (uroven' zhizni)? The same form of question was asked about respondents' jobs, housing, medical care, and access to material goods. Their answers were scored in categories ranked from one to four: very satisfied (=1), somewhat satisfied (=2), somewhat

dissatisfied (=3), or very dissatisfied (=4). Thus, the higher the numerical score, the less the satisfaction. Respondents' scores are shown in Tables 1 - 3, in total and broken down by demographic and economic groups.

Our respondents reported themselves as relatively satisfied with certain aspects of the quality of their lives during their last normal periods in the Soviet Union. When asked to score satisfaction with standard of living, a majority was either very or somewhat satisfied (59.2%). Only a minority was very dissatisfied (14.4%). A midpoint score would be 2.5. The average (mean) score for our respondents was 2.43, somewhat better than mid-scale.^{3A}

As has been found to be true for other countries and other surveys, our respondents' satisfaction with their standard of living varied over the life span and from place to place.⁴ Older people were more satisfied than younger people. Married people were more satisfied with their standard of living than those who were widowed, divorced, separated, or never married. People who lived in cities with less than 100,000 population were more satisfied than those who lived in very large cities of more than one million population (except for young people, who were more satisfied in very large cities).

We were surprised that so many respondents expressed themselves relatively satisfied with their standard of living. It was not expected from people who had chosen to leave their country. The degree of satisfaction expressed varied directly and inversely with the extent to which the respondent participated in the decision to emigrate. The actual decisionmaker varied within families. Most members shared in the decision, but some families had a single decisionmaker and a follower or two. In single-decisionmaker families, the leader and the followers

differed, as might be expected, in reported satisfaction. Those respondents who themselves made the decision to leave the Soviet Union were significantly less satisfied with their lives in the Soviet Union than were those who simply followed along. Those who shared in the decision to leave fell somewhere in between.

-- Insert Table 4 about here --

Emigrants who participated in the survey originated in different Soviet regions and republics, and their responses show some regional variation. The Soviet Union's dominant republic, the RSFSR, is believed by many to be the regime's favorite, but the half [46%] of our respondents who came from the RSFSR were less satisfied with their standard of living than were the people who lived in western or southern republics.

-- Insert Table 5 about here --

When respondents scored both their satisfaction and their actual standard of living, some regional divergences appeared.⁵ Most satisfied with their standard of living were the ethnic Ukrainian respondents who lived in the Ukraine, and they also estimated their standard of living there as relatively high. Ethnic Russians from the RSFSR reported their standard of living higher than others, but they rated their satisfaction to be the lowest of all. Jewish respondents estimated their actual standard of living as below average, but they reported themselves to be fairly satisfied with it. The results offer some evidence of ethnic

variation and suggest that the highest standards of living may not yield comparable satisfaction, and that respondents compared themselves to different standards.

Standard of living has many individual domains. In the next section, we focus on the domain of housing, which is most closely related to reported satisfaction with standard of living among our respondents.

Satisfaction with Housing

The strongest impact on our respondents' overall satisfaction with their standard of living in the USSR was made by the evaluation of their housing during the LNP. As is true for Western Europe, too, a favorable evaluation of standard of living was most highly correlated with a positive evaluation of LNP housing, and a negative evaluation with a poor rating. In general, our respondents were more satisfied with their housing than with their standard of living. Only one-third expressed any dissatisfaction.

Most Soviet citizens rent apartments very cheaply in buildings owned by municipalities or enterprises. A few become homeowners by buying (or inheriting) an apartment in a cooperatively-owned building or a detached house located on public land. Half of the respondents in our sample lived in state-owned separate apartments, and one-fifth rented rooms in those apartments or lived in public dormitories. The remainder owned privately either a cooperative apartment (22%) or a free-standing house (9%).

-- Insert Tables 6 & 7 about here --

As might be expected, homeowners were the most satisfied with their housing. Cooperative apartment owners were only slightly less satisfied than house owners. Apartment renters, the majority of our respondents, were fairly satisfied with their housing. A minority, however, who lived in rented rooms in others' apartments, or who sublet apartments or who lived in dormitory rooms were highly dissatisfied.

As Soviet citizens are obliged to invest a considerable amount of time and energy to obtain and maintain housing, reported satisfaction with housing is significant. We asked respondents who had received new quarters in their LNP about the quality of service that they received from local government in searching for housing or for housing improvements. When a large sample (N = 2793) was asked about any contacts they may have had with government officials, over half of their reported contacts concerned housing, for themselves and for others, for acquisition or repair. More than half of these respondents also replied that government officials had satisfied their requests. When a smaller sample (N = 933) was asked in greater detail about the service that it received when searching for housing, official bureaus were described as slow, discourteous, and incompetent. The result seems to be the judgement that government officials did respond adequately to respondents' requests relating to housing, but in an insulting manner.

Younger respondents in our sample (those under the age of 30) were the least satisfied with housing. The burden of queuing for housing does in fact fall predominantly on the young, and most of their dissatisfaction clearly derived from the poor quality of the housing that they were able to find. By and large, younger people in our sample lived in dormitories or they had to sublet apartments. Dormitories are sparse in conveniences and creature comforts, and apartments are

expensive to sublet.

The desire for space of one's own was felt by respondents of all ages. As in most Western countries, the difference in satisfaction between those who owned and those who rented is evident.⁶ Owners are, as usual, more satisfied. For our Soviet respondents, however, the difference between shared living space and private living space was a more significant distinction. Whether their housing was state-owned or owner-occupied, our respondents unambiguously rejected communal life. Soviet citizens obviously do not want to share kitchens, bathrooms or space with other families.

-- Insert Table 8 about here --

Satisfaction with housing in the LNP was highly sensitive to the qualitative attributes of housing. Most important to reported satisfaction was sheer space: square meters. Our respondents had very precise knowledge about housing space. The people who were most satisfied with their housing during the LNP occupied, on average, 86 percent more total space and 80 percent more space per person.^{6A}

Although Soviet state-owned apartments dominate Soviet housing, about one-third of our respondents owned a home in the Soviet Union: a house, a cooperative apartment, and/or a dacha. Most of these respondents were married or widowed, and family size was somewhat smaller than average. As might be expected, the owners of houses and dachas tended to live in smaller cities (population less than 100,000), while owners of cooperative apartments tended to live in larger cities (more than one million). Many received their dwellings by inheritance. Very few owned more than one housing unit (which is the legal maximum).

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Owners generally tended more than other respondents to have witnessed an improvement in general housing conditions during their last five years in the Soviet Union. Insofar as the results of our survey can be extrapolated to the Soviet urban population, they indicate a reservoir of middle-class stability among home-owners that has seldom before been noted.

Satisfaction with Goods

The strongest negative impact on respondents' satisfaction with standard of living was made by their recollection of Soviet goods shortages and their dissatisfaction with daily queues, inferior quality, and sporadic supply. The score on goods satisfaction is almost a full point lower than any other satisfaction score (See Table 1).

While this response is not surprising, some related aspects are striking. One unexpected finding is that respondents who lived outside the capital cities were less dissatisfied with goods supply than those who lived in capital cities, where the supply is certainly better. According to official Soviet statistics, for example, large cities are so superior to small towns in their supply of goods that the rural population buys a significant share of its goods in large cities.⁷ The daytime population of major cities vastly exceeds their permanent population because of commuting shoppers. Moscow, for example, is estimated to have one million transient shoppers on any given day. The relatively greater goods dissatisfaction of the inhabitants of the largest cities must, therefore, be based upon something other than comparison with life elsewhere in the USSR.

-- Insert Table 9 about here --

A possible explanation for the greater goods dissatisfaction in the large cities is that their citizens have more knowledge of what goods are available to consumers outside the Soviet Union. Thus, our respondents are reporting dissatisfaction because of an unfavorable international comparison.⁸ Some evidence for this view is found in the fact that the more satisfied respondents listened much less frequently to foreign broadcasts than did the more dissatisfied.

Although all of our respondents were dissatisfied with Soviet goods shortages, differences can be found among them. Dissatisfaction with goods availability rises sharply with household income and against the household savings rate. Better off respondents were earning more and saving less in the LNP, and shortages clearly aggravated them more than the others. The potential adverse effect upon incentives to work is clear and supported by the frequency with which this group of respondents reported the use of working time for personal shopping.

The sources of dissatisfaction with goods availability can be examined more closely in our respondents' experience with the distribution of food. Most respondents agreed that meat was in deficit supply in state stores most of the time, but this did not mean that meat was always and everywhere unavailable. When asked to estimate how frequently they ate meat in LNP, the majority (62%) answered "daily," and only a very few ate meat as infrequently as several times a month. The majority of respondents also reported cheese, kefir (fermented milk), milk, and eggs in their daily diets. The coexistence of fairly frequent meat consumption and complaints about deficits emphasizes the effects of price distortion and of the distribution of meat and other premium products outside the state retail network.

-- Insert Table 10 about here --

In general, our respondents' criticisms did not focus directly on the food distribution system. When respondents were asked to give reasons for meat shortages they criticized the producers, not the distribution system. They believed that deficits were caused by the system of farming, or because farm labor productivity was too low. They also saw little relationship between the low price of subsidized meat in state stores and supply shortages. They seemed to want low (below cost of production) prices and a perfectly elastic supply at those prices.

Meat and other foods are, of course, normally available at higher prices on the private (collective farm) market, the rynok. Two groups spent much more than average in the rynok: those who reported themselves very satisfied with goods availability and those who reported themselves very dissatisfied. Both groups received more household income than average, and spent more than average, but the rynok served as a safety valve only for those few who were satisfied. It is probable that this difference between groups marks a shift of demand from food to non-food items, for the dissatisfied bought much more on the unofficial (na levo) market.

In contrast to the rynok, which attracted both satisfied and dissatisfied urbanites, the na levo market attracted primarily the dissatisfied, and dissatisfaction rose steadily with expenditures na levo. It is probable that the dissatisfaction arose not only from the higher prices but from the inconvenience, for dissatisfied shoppers

-- Insert Table 11 about here --

spent far more time shopping and were much more likely to take off time from work for personal business such as shopping. The dissatisfied were more pessimistic too: they saw a significant change for the worse in the supply of goods, and almost all of them believed that the Soviet Union would never be able to solve its goods shortages.

Another distribution system outside regular state stores is the network of shops that are closed to all but specially privileged shoppers. Only a few of our respondents had access to closed shops. Interestingly, they were only slightly more satisfied than average with the goods available to them when they lived in the Soviet Union. The prevailing system of food distribution is clearly a major source of dissatisfaction for essentially all income classes, even the best off and even the most privileged of these.

The Soviet Union takes pride in its facilities for sports, the arts, and other leisure time activities. Since these activities are often subsidized and supplied only by the public sector, they are a possible additional source of goods dissatisfaction. There was, however, no spillover effect between goods satisfaction and a respondent's attendance at spectator sports or cultural events. For what it's worth, the dissatisfied were much more likely than the satisfied to read in their leisure time.

Satisfied and dissatisfied consumers differed in their attitudes toward poverty. When respondents were asked to estimate a minimum poverty level of family income, those who were dissatisfied specified a relatively high minimum (393 rubles per month), while respondents who were satisfied chose a relatively low figure (324 rubles per month). Correspondingly the dissatisfied estimate that a much larger number of

people live in poverty than do the satisfied. These results are consistent with the notion that Soviet consumers, as they divert their expenditures into the rynok and na levo channels, perceive a sharp discontinuity between official prices and open market prices, which amplifies the difference between their expectations and reality. It makes the actual market prices seem unrealistic, and the state retail prices seem realistic. It frustrates consumers (and thus workers).

Job Satisfaction

Job satisfaction looms large in what satisfaction our respondents recalled about their former lives in the Soviet Union. Jobs were reported as the most satisfying aspect of life in the Soviet Union. The women in our sample were especially enthusiastic about their LNP jobs, and they ranked job satisfaction even higher than did the men. As with the other satisfaction measures, older people were again more satisfied than the younger. But even the young people were more satisfied with their jobs than with any other aspect of their lives.

Following the tenets of economic rationality, one might expect that--other things equal--the people who earned more would be more satisfied with their jobs and, indeed, the respondents who earned the highest incomes ranked job satisfaction higher than the people who earned less, but the relationship is weak and only the gap between the very satisfied and very dissatisfied is statistically significant. A major part of job satisfaction must be attributed, therefore, to noneconomic factors.

Working conditions on-the-job contributed to job satisfaction for all income groups. Most of all, however, job satisfaction is associated with whether respondents were able to work in the specialty for which

they had been trained. It was also associated with the job holder's feeling that working conditions allowed him or her to do the job well - that both enough information and suitable equipment were available. Strikingly, the people who were most satisfied with their jobs - and this is the majority - felt that trade unions, and even the CPSU, did not worsen working conditions. Many of them, in fact, felt that these institutions served to improve conditions.

-- Insert Table 12 about here --

In contrast, the minority of people that was dissatisfied with jobs was more likely to support certain commonly-held Western perceptions about Soviet working conditions. They felt that they often were not able to use their skills, or to receive enough information or equipment. They usually believed that the trade union and CPSU worsened their working conditions and that blat or protektsiia was the main source of job advancement. They were more likely to criticize Soviet enterprises for low productivity.

It is important to note that the people whose jobs gave them little or no satisfaction were not working at menial, repetitive tasks. They were among the well-educated, often having completed college. They felt secure in their jobs, fearing being fired less than others for any reason. But they still felt highly alienated. They scored themselves relatively low in "influence" and "privilege." They felt that they had been held back more than anyone else by their nationality and/or political beliefs (but, interestingly, not by their religious beliefs). They were alienated not only from their work, but from their co-workers. They were not tolerant, being, for example, much less willing to accept

a Buriat or an Uzbek as a coworker or supervisor than were less alienated workers.

There is a modicum of evidence for cognitive dissonance here: despite confidence in job security, the dissatisfied were much more likely than average to have experienced unemployment. Despite their belief that fewer workers could accomplish the same job tasks, they were much more likely than others to spend work time on personal business, a problem that differs from sheer redundancy.

As might be expected, the workers who were dissatisfied with their jobs in the Soviet Union played leading roles in the decisions of their families to emigrate. Interestingly, they are more satisfied than average with their lives in the United States and more optimistic about their future here. The alienation that pervaded their lives in the Soviet Union has almost disappeared in the new environment. Were these alienated workers a majority in the Soviet Union? Are their reports about jobs and enterprise conditions more accurate than those of the less alienated, or had alienation spread from other dimensions to color perception of job and work station? The evidence of the Soviet Interview Project indicates they were a well-educated, critical minority.

Health and Medical Care

When our respondents were asked to name what the United States could learn from the Soviet Union, they often pointed to its health care system. When they were asked if they preferred financing for health care that was private or public, they overwhelmingly reinforced their approval of the Soviet medical system and chose public financing.

Despite a ringing endorsement of socialized medicine, our respondents were not as satisfied with Soviet medical care as they were, say, with their housing or their jobs. The main reason is a differentiation of respondents by educational level. Although a clear majority of respondents declared itself satisfied or very satisfied with medical care, the best educated -- the people who had completed higher education -- were highly dissatisfied, and their responses brought down the average score.

-- Insert Table 13 about here --

Respondents who were satisfied with Soviet medical care did not, however, avoid private doctors or private clinics. On the contrary, they were much more likely to have used a private clinic or physician during the LNP than were the people who were more dissatisfied. The people who were satisfied with Soviet medical care also were more pleased with the promptness, courtesy, and quality of private medical services than those of public services. But they regarded their encounter with private medicine ambivalently. Paid clinics scored very high, but paid doctors gave little satisfaction.

The satisfied users of official Soviet medical care included the

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elderly, and association between satisfaction and age is strong. Older people were more satisfied than younger, and retired people were more satisfied than working people or students. The older group was generally less educated, but even when their scores were adjusted for education, they were more satisfied with medical care. The elderly, of course, suffered from poorer health, for the scores on a measure of self-assessed health in the LNP diminish steadily with age. Presumably this group had more experience with the health care system than other respondents.

Although a large majority of respondents received medical care at public polyclinics, a small number obtained it at work, and an even smaller number had access to closed clinics. Both the workplace clinics and the closed clinics satisfied their users more than did the polyclinic. The main reason seems to be that clients were treated more promptly.

An important economic reason for endorsing socialized medicine is its low user cost, and the support for publicly provided health care was indeed strongest among low-income respondents. As with goods satisfaction, support was also stronger among people who lived outside capital cities, where medical services are in fact assumed, by most Western observers, to be relatively poor. It was also stronger among women, who earn less. The most satisfied demographic group of all with medical care was composed of older widows who lived in cities with less than one million population.

Conclusions

Certain sub-groups of our respondents have been identified with different degrees of reported satisfaction or dissatisfaction. Sex, age and educational differences stand out with particular strength. It will be useful also to compare our emigrant groups with the citizens of other countries to see if Soviet experience is unique or typical of broader social phenomena.

Sex differences. The women in our sample were more satisfied with all measured aspects of their Soviet lives except goods, where there was no significant difference between the sexes. They were more satisfied with medical care than men, despite (or perhaps because of) reporting themselves as in poorer health. They were slightly more satisfied with housing, and significantly more satisfied with their jobs.

Yet it is interesting to note that both men and women ranked women's life as the more difficult in the USSR. Our respondents were asked: "Taking everything into account, who has the better life in the Soviet Union -- men or women?" Overwhelmingly, they responded that men had a better life. Only 3% of men and 2% of women answered "women." Furthermore, when people were asked to evaluate their actual standard of living, women ranked themselves consistently lower than men, but their satisfaction with that standard of living was not appreciably different from men's.

Most striking of all is the very strong degree of women's satisfaction with their jobs, and this in the face of high male job satisfaction too. Whatever the reason, wage discrimination and job segregation, which have been shown to prevail in the USSR as elsewhere in the industrialized world, do not seem to have taken the satisfaction

out of women's jobs in the USSR. One reason may be an association between satisfaction and job security. The analysis by Paul Gregory in this volume suggests strongly that the levels of employment which pay higher wages and impose greater responsibilities are the least secure. The most security is found in unskilled and blue-collar jobs. Women would benefit in job satisfaction (other things being equal) from the security that comes with holding lower status jobs.

Women, especially if they were elderly, also expressed much more satisfaction than men with socialized medical service. This phenomenon has been found also in Italy and Ireland.⁹ In commenting on the cross-national difference between women's attitudes toward health care, Davis and Fine-Davis hypothesize that greater satisfaction with health care occurs among lower income and lower status women because their relative powerlessness in society limits their expectations. The evidence is that women are much more dissatisfied with health care when their status improves, as in Denmark. This interpretation suggests that Soviet women, as they lighten their home burdens and improve their status, will emerge more articulate and more dissatisfied.

Age Differences. A second group whose satisfaction stands out from others is made up of older people. They were more satisfied with health care than the young, despite (or perhaps because of) their poorer health. They were more satisfied with their housing, jobs, and standard of living. In contrast, the younger members of society in Western Europe recently reported themselves among the most satisfied.¹⁰ (The British represented a notable exception in that study, and Americans have also been an exception.)

Memories of World War II and the 1930s and the ability to gauge the great changes that have taken place since Stalin's death in 1953 may be

relevant. Comparatively speaking, these long-term improvements swamp any recent reversals in material well-being and political liberties. Access to free medical care seems to be an important determinant of well-being for the aged too. The satisfaction of older citizens is potentially significant in a larger sense, for the USSR is passing through a transition from older to younger leaders. Donna Bahry's analysis in this volume expands upon the political significance of this generational difference.

The prospect of future reform brings us to examine the sentiments of the younger generation among those who emigrated to the United States. This group expressed more disaffection than any other group. They were more dissatisfied with their jobs and the goods that they could (or could not) buy. They were more likely to slip away from work to attend to personal matters or to buy goods na levo. More often than other respondents, they felt that the United States could learn nothing from the Soviet Union and that a large number of Soviet citizens live in poverty.

Educational Differences. The dissatisfaction of youth is, however, confounded by the effects of education. College-educated emigrants formed the most consistently dissatisfied group. They were much the most dissatisfied with their jobs and goods availability. They were only diffident about their housing. But they ranked their standard of living and their relative privileges fairly high. The dissatisfaction of this group is critical for understanding the Soviet Union today, for these dissatisfied people by and large are both young and well-trained.

The two demographic elements that are common to all measures of satisfaction are age and educational level, which are themselves highly

correlated. The demographic components can be aggregated, along with other components, into one composite indicator of satisfaction by weighting each component by a standardized beta coefficient that represents its contribution to satisfaction. The method that estimates the beta coefficient is a path analysis, or two-stage least squares, one of which is shown for each satisfaction measure in Charts 1 - 4. In order to clarify the diagrams, paths whose coefficients were less than 0.04, or which were not statistically significant, have been deleted.

In the path analysis we assume that satisfaction with standard of living is a composite built from the satisfaction that people gained from their jobs, medical care, housing, and goods availability. Our assumption is based on a factor analysis which showed that all satisfaction variables clustered together and can be considered as one entity. We have adopted the intuitively plausible assumption that the cluster centers around the most general satisfaction, that of "standard of living." While the cluster will be useful in further, more aggregated analyses, the cluster's components still have some particular characteristics of interest in themselves. These are shown in the path analysis diagrams, and several may be mentioned explicitly.

(1) As noted, age and education were negatively correlated: younger people were better educated. The correlation was lowest in the path analysis for job satisfaction, which includes only those respondents who had jobs. This indicates that the age-education correlation is probably disappearing from the population, however slowly.

When the correlated effects of age and education were removed, housing satisfaction was affected only by age: older people were more satisfied with their housing. Put in other words the people who were

well educated were as satisfied with their housing as those who were less educated.

In other analyses, educational level had an impact that was independent of age. Less educated people were more satisfied with medical care, goods availability, and jobs. While older people were similarly more satisfied with medical care and goods availability, they were as satisfied with their jobs as younger people. Thus the effects of age and education on people's satisfaction with medical care and goods availability were the same, but on satisfaction with housing and jobs they differed.

(2) Marital status affected goods satisfaction, in that married people were more satisfied, but its primary effect was to increase household income, which mildly increased satisfaction.

(3) High income respondents were overall more satisfied with their jobs, but well educated people were not, and the effects of education were somewhat stronger than the effects of income.

(4) Satisfaction with standard of living was captured best by jobs, goods, and housing. Medical care played a lesser role.

The data collected by SIP does not permit us to determine unambiguously just how satisfied or dissatisfied the referent population is on an absolute scale. These results do, however, provide a view of differentiation within the referent population - differentiation primarily by sex, age, education, income and city size. For the first time, it is possible to see the general contours of social satisfaction (or dissatisfaction). What is striking is the discovery that those who were disproportionately reaping the material benefits of Soviet socialist society in the late 1970's were, in general, the least satisfied members of that society. Those who lived in the most

desirable cities, had the highest educational attainment, held the most skilled jobs, earned the top-level incomes, occupied the best housing and dominated consumption in all markets reported themselves the least satisfied. This is in sharp contrast with the findings of the Harvard project of the early 1950's, in which those who had been the most successful materially expressed the least dissatisfaction with Soviet society.¹¹

Finally, although our respondents have demonstrated their negative overall evaluation of Soviet society by having left the USSR, our findings show that there were nonetheless certain aspects of Soviet society which generated satisfaction and thus presumably support from the urban population. Comparisons based upon their subsequent lives in the United States have undoubtedly affected their judgements, but in most cases the effect would have been to clarify or improve the accuracy of such qualitative judgements. This is clearly the case, for example, for evaluations of medical care, goods availability, job satisfaction, and the like. The view from the bottom upward, from the household sector toward the top, is a collection of views that show considerable heterogeneity and variety.

FOOTNOTES

1. For most Soviets, the decision to emigrate is irrevocable and the complex effects of emigration itself upon the respondents' subjective judgements are the subject of this volume's methodological appendices. Briefly put, the problems are memory decay, contamination, and "psychological weighting." The last is defined as a subjective tendency to romanticize or denigrate conditions irrevocably left behind. It can only be inferred from the comparison of objective and subjective indicators and will be considered in the text. To deal with memory decay and contamination the interviewers asked respondents to focus on the "last normal period" (LNP) before the decision to emigrate (or some other event related to emigration) caused their lives to change. This device put the respondent into an historical ambience as close as possible to yesterday's reality.

2. Campbell, p. 22.

3. Near, Smith, Rice and Hunt [p. 184] find a weak association in U.S. data; Andrews and Inglehart [p. 85] find that the association is stronger in European data than in U.S. data.

3A. For consistency and following standard practice in describing quality of life statistics, we shall refer to degrees of "satisfaction" rather than degrees of "dissatisfaction." Reader should keep this in mind in reading our description so that they do not draw false or confusing conclusions. After all, most of our respondents judged their LNP lives unsatisfactory on an overall basis - else they would not have left.

4. All statistical tests are significant at a level of 95 percent or higher unless otherwise noted. The chi square statistics shown in the tables refer to the frequency distributions of the four satisfaction

categories by the named independent variable (for example: age, sex, or income).

5. Respondents were asked both to score their satisfaction with their standard of living and to rank their standard of living against other Soviet people. The comparisons are shown in Table 5B. There were five ranks on the second judgement: far above average (=1)....far below average (=5).

6. Davis, Fine-Davis and Meehan, p. 348.

6A. This close relationship between space and space per person indicates how successfully Soviet housing was allocated on the basis of family size. Accordingly, housing satisfaction differed not at all among families of different sizes.

7. Narodnoe khoziaistvo SSSR v 1983 g., p. 461.

8. The "Easterlin paradox" states that people usually compare themselves to citizens of their own country, and only rarely to citizens of other countries. The paradox has received empirical support but may not apply to people contemplating emigration. [Easterlin; Otis Dudley Duncan, p. 273].

9. Fine-Davis and Davis, p. 353. Marianne Ferber has suggested also that Soviet women were more satisfied with Soviet medical care than men because the physicians are mainly women.

10. Davis and Fine-Davis, p. 351.

11. Inkeles and Bauer, p. 260.

The authors thank Marianne Ferber and Joe Spaeth for helpful comments on an earlier draft, and Thomas Richardson and Chong-Ook Rhee for their excellent research assistance.

REFERENCES

Andrews, Frank M. and Ronald F. Inglehart. 1979. "The Structure of Subjective Well-Being in Nine Western Societies." Social Indicators Research, 6:73-90.

Campbell, Angus. 1981. The Sense of Well-Being in America, New York: McGraw-Hill.

Davis, E.E., M. Fine-Davis, and G. Meehan. 1982. "Demographic Determinants of Perceived Well-Being in 8 European Countries," Social Indicators Research, 10:341-358.

Duncan, Otis Dudley. 1975. "Does Money Buy Satisfaction?" Social Indicators Research, 2:267-274.

Easterlin, R.A. 1974. "Does Economic Growth Improve the Human Lot?" In P. A. David and M. W. Reder, ed., Nations and Households in Economic Growth. New York: Academic Press.

Fine-Davis, M. and E. E. Davis. 1982. "Predictors of Satisfaction with Environmental Quality in 8 European Countries." Social Indicators Research, 11:341-362.

Inkeles, Alex and Raymond Bauer. 1959. The Soviet Citizen. Cambridge: Harvard University Press.

Near, Janet P., C. Ann Smith, Robert W. Rice, and R. G. Hunt. 1984. "A Comparison of Work and Nonwork Predictors of Life Satisfaction." Academy of Management Journal. 27:184-190.

TABLE 1: Self-Assessed Satisfaction among Soviet Emigrants

		"How satisfied were you with:"				
		Standard of Living	Housing	Goods	Job	Medical Care
Very Satisfied	N = 310 Z = 11.1	645 23.1	139 5.0	711 25.5	518 18.5	
Somewhat Satisfied	N = 1343 Z = 48.1	1213 43.4	488 17.5	1054 37.7	1142 40.9	
Somewhat Dissatisfied	N = 694 Z = 24.8	379 13.6	634 22.7	303 10.8	570 20.4	
Very Dissatisfied	N = 403 Z = 14.4	533 19.1	1477 52.9	170 6.1	450 16.1	
Missing Values	N = 43 Z = 1.5	23 0.9	55 2.1	555 20.2	111 4.0	
TOTAL	N = 2793	2793	2793	2793	2793	2793

TABLE 2A: Average Satisfaction Scores Among Soviet Emigrants by Age

"How satisfied were you with:				
Standard of Living	Housing	Goods	Job	Medical Care

Age at Last Normal Period (Quartiles):

Under 31 years		2.59	2.56	3.44	2.08	2.48
	N =	662	663	657	544	644
	Z =	23.70	23.74	23.54	19.48	23.06
31 - 40 years		2.48	2.30	3.40	1.98	2.54
	N =	720	722	717	680	692
	Z =	25.78	25.85	25.67	24.35	24.78
41 - 54 years		2.38	2.17	3.20	1.93	2.31
	N =	715	718	710	646	694
	Z =	25.60	25.71	25.42	23.13	24.85
over 54 years		2.28	2.14	2.99	1.84	2.07
	N =	653	667	654	368	650
	Z =	23.38	23.88	23.42	13.18	23.27
Average Score		2.43	2.29	3.26	1.97	2.36
SUBTOTAL						
	N =	2750	2770	2738	2238	2680
	Z =	98.46	99.18	98.05	80.14	95.96
Missing Values						
	N =	43	23	55	555	113
	Z =	1.54	0.82	1.95	19.86	4.04
TOTAL						
	N =	2793	2793	2793	2793	2793
Chi square =		72.88	71.95	143.75	38.39	98.27
df =		9	9	9	9	9
significance =		0.000	0.000	0.000	0.000	0.000

TABLE 2B: Average Satisfaction Scores Among Soviet Emigrants by Sex

"How satisfied were you with:				
Standard of Living	Housing	Goods	Job	Medical Care

Sex:

Men		2.46	2.35	3.28	2.04	2.45
	N =	1200	1205	1197	1083	1149
	\bar{x} =	42.96	43.14	42.86	38.78	41.14
Women		2.41	2.24	3.24	1.91	2.29
	N =	1550	1565	1541	1155	1531
	\bar{x} =	55.50	56.03	55.17	41.35	54.82
Average Score		2.43	2.29	3.26	1.97	2.36
SUBTOTAL						
	N =	2750	2770	2738	2238	2680
	\bar{x} =	98.46	99.18	98.05	80.14	95.96
Missing Values						
	N =	43	23	55	555	113
	\bar{x} =	1.54	0.82	1.95	19.86	4.04
TOTAL						
	N =	2793	2793	2793	2793	2793
Chi square =		5.26	7.24	0.84	16.17	18.16
df =		3	3	3	3	3
significance =		0.15	0.06	0.84	0.001	0.000

TABLE 2C: Average Satisfaction Scores Among Soviet Emigrants, by Marital Status

"How satisfied were you with:					
	Standard of Living	Housing	Goods	Job	Medical Care
Marital Status:					
Married	2.40	2.26	3.27	1.94	2.37
N =	2148	2158	2146	1802	2105
Z =	76.91	77.26	76.83	64.52	75.37
Widowed	2.45	2.20	2.95	1.97	2.05
N =	213	220	211	120	211
Z =	7.63	7.88	7.55	4.30	7.55
Single	2.61	2.49	3.39	2.13	2.46
N =	389	392	381	316	364
Z =	13.93	14.04	13.64	11.31	13.03
Average Score	2.43	2.29	3.26	1.97	2.36
SUBTOTAL					
N =	2750	2770	2738	2238	2680
Z =	98.47	99.18	98.02	80.13	95.95
Missing Values					
N =	43	23	55	555	113
Z =	1.53	0.82	1.98	19.87	4.05
TOTAL					
N =	2793	2793	2793	2793	2793
Chi square =	23.78	22.67	31.51	18.53	34.37
df =	6	6	6	6	6
significance =	0.000	0.000	0.000	0.000	0.000

TABLE 2D: Average Satisfaction Scores Among Soviet Emigrants by City Size

"How satisfied were you with:				
Standard of Living	Housing	Goods	Job	Medical Care

City Size:

More than 1 Million	2.44	2.27	3.29	2.00	2.44
N =	1977	1995	1971	1605	1928
Z =	70.78	71.43	70.57	57.47	69.03
0.5 to 1 Million	2.54	2.51	3.30	1.92	2.28
N =	229	228	227	185	220
Z =	8.20	8.16	8.13	6.62	7.88
100,000 to 0.5 Million	2.34	2.28	3.12	1.87	2.05
N =	468	471	468	390	459
Z =	16.76	16.86	16.76	13.96	16.43
Less than 100,000	2.43	2.27	3.08	2.05	2.17
N =	75	75	71	58	72
Z =	2.69	2.69	2.54	2.08	2.58
Average Score	2.43	2.29	3.26	1.97	2.34
SUBTOTAL					
N =	2749	2769	2737	2238	2679
Z =	98.43	99.14	98.00	80.13	95.92
Missing Values					
N =	44	24	56	555	114
Z =	1.57	0.86	2.00	19.87	4.08
TOTAL					
N =	2793	2793	2793	2793	2793
Chi square =	17.45	20.24	28.45	11.79	74.34
df =	9	9	9	9	9
significance =	0.016	0.042	0.000	0.225	0.001

TABLE 2E: Average Satisfaction Scores Among Soviet Emigrants, by Occupational Status

"How satisfied were you with:					
	Standard of Living	Housing	Goods	Job	Medical Care
Occupational Status:					
Professional:	2.47	2.30	3.38	1.98	2.49
N =	1540	1550	1533	1330	1487
Z =	55.14	55.50	54.89	47.62	53.24
White Collar:	2.38	2.31	3.11	1.98	2.22
N =	434	441	326	326	426
Z =	15.54	15.79	15.54	11.67	15.25
Blue Collar:	2.38	2.25	3.07	1.93	2.15
N =	699	701	694	572	690
Z =	25.03	25.1	24.85	20.48	24.70
Average Score	2.43	2.29	3.26	1.97	2.36
SUBTOTAL					
N =	2673	2692	2661	2228	2603
Z =	95.71	96.39	95.28	79.77	93.19
Missing Values					
N =	120	101	132	565	190
Z =	4.29	3.61	4.72	20.23	6.81
TOTAL					
N =	2793	2793	2793	2793	2793
Chi square =	21.20	7.70	70.73	22.20	73.84
df =	6	6	6	6	6
significance =	0.002	0.261	0.000	0.001	0.000

TABLE 2F: Satisfaction Scores Among Soviet Emigrants, by Occupational Status

"Compared with other Soviet people,
was your material standard of living
far above average (=1)...far below
average (=5):

Professional		2.60
	N =	1545
	Z =	55.32
White Collar		2.80
	N =	441
	Z =	15.79
Blue Collar		2.82
	N =	706
	Z =	25.28
Average Score		2.69
SUBTOTAL		
	N =	2692
	Z =	96.39
Missing Values		
	N =	101
	Z =	3.61
TOTAL		
	N =	2793
Chi square =		45.48
df =		8
significance =		0.000

TABLE 3A: Average Satisfaction Scores Among Soviet Emigrants, by Respondent's Income

		How satisfied were you with:				
		Standard of Living	Housing	Goods	Job	Medical Care
Respondent's Income (in Quartiles)						
Less than 104 rubles/month		2.52	2.39	3.22	2.11	2.27
	N =	683	687	679	489	673
	Z =	24.45	24.60	24.31	17.51	24.10
104-145 rubles/mo.		2.49	2.33	3.23	1.98	2.39
	N =	660	662	653	561	641
	Z =	23.63	23.70	23.38	20.09	22.95
146-198 rubles/mo.		2.44	2.25	3.31	1.97	2.38
	N =	639	644	639	573	614
	Z =	22.88	23.06	22.88	20.52	21.98
More than 198 rubles/month		2.28	2.20	3.27	1.84	2.39
	N =	696	704	695	608	680
	Z =	24.92	25.21	24.88	21.77	24.35
Average Score		2.43	2.29	3.26	1.97	2.36
SUBTOTAL						
	N =	2678	2697	2666	2231	2608
	Z =	95.88	96.57	95.45	79.89	93.38
Missing Values						
	N =	115	96	127	562	185
	Z =	4.12	3.43	4.55	20.11	6.62
TOTAL						
	N =	2793	2793	2793	2793	2793
Chi square =		46.41	20.36	9.08	33.95	13.57
df =		9	9	9	9	9
significance =		0.000	0.015	0.430	0.000	0.138

TABLE 3B: Average Satisfaction Scores Among Soviet Emigrants, by Household Income

		"How satisfied were you with:				
		Standard of Living	Housing	Goods	Job	Medical Care
Household Income (in Quartiles)						
Less than 224 rubles/month		2.64	2.41	3.25	2.08	2.30
	N =	689	697	679	435	669
	X =	24.67	24.96	24.31	15.57	23.95
224-315 rubles/mo.		2.54	2.29	3.24	1.95	2.34
	N =	656	658	650	568	638
	X =	23.49	23.56	23.27	20.34	22.84
316-447 rubles/mo.		2.32	2.21	3.24	1.94	2.34
	N =	675	682	680	596	664
	X =	24.13	24.42	24.35	21.34	23.77
More than 447 rubles/month		2.25	2.25	3.31	1.93	2.44
	N =	730	733	729	639	709
	X =	26.14	26.24	26.10	22.88	25.38
Average Score		2.43	2.29	3.26	1.97	2.36
SUBTOTAL						
	N =	2750	2770	2738	2238	2680
	X =	98.43	99.18	98.03	80.13	95.94
Missing Values						
	N =	43	23	55	555	113
	X =	1.57	0.83	1.97	19.87	4.06
TOTAL						
	N =	2793	2793	2793	2793	2793
Chi square =		109.02	29.48	19.93	27.95	20.45
df =		9	9	9	9	9
significance =		0.000	0.000	0.018	0.001	0.015

TABLE 3C: Average Satisfaction Scores Among Soviet Emigrants,

by Respondent's Highest Education

"How satisfied were you with:				
Standard of Living	Housing	Goods	Job	Medical Care

Respondent's Education.

Less than 4 years	2.04	1.89	2.38	1.59	1.61
N = 25	26	26	12	26	
Z = 0.90	0.93	0.93	0.43	0.93	
4 - 6 years	2.23	2.18	2.75	1.66	1.77
N = 108	108	105	58	112	
Z = 3.87	3.87	3.76	2.08	4.01	
7 - 8 years	2.25	2.11	2.83	1.76	1.93
N = 216	222	223	154	216	
Z = 7.73	7.95	8.00	5.51	7.73	
Incomplete sec.	2.30	2.23	3.07	1.82	2.17
N = 88	91	86	61	89	
Z = 3.15	3.23	3.08	2.19	3.19	
Trade school	2.12	1.77	3.04	1.85	2.00
N = 26	26	25	20	26	
Z = 0.93	0.93	0.90	0.72	0.93	
Attestat	2.43	2.39	3.12	1.89	2.20
N = 455	458	452	360	440	
Z = 16.30	16.40	16.18	12.90	15.75	
Complete secondary specialized	2.37	2.26	3.15	1.85	2.25
N = 671	673	669	558	651	
Z = 24.02	24.10	24.00	20.00	23.31	
Incomplete higher	2.54	2.39	3.51	2.20	2.70
N = 160	160	158	111	154	
Z = 5.73	5.73	5.66	4.00	5.51	
Complete higher	2.55	2.33	3.55	2.12	2.65
N = 1001	1006	994	904	966	
Z = 35.84	36.02	35.59	32.37	34.59	
Average Score	2.43	2.29	3.26	1.97	2.36

TABLE 3C: Average Satisfaction Scores Among Soviet Emigrants,

<hr/>					
SUBTOTAL					
N =	2750	2770	2738	2238	2680
Z =	98.47	99.18	98.04	80.14	95.95
<hr/>					
Missing Values					
N =	43	23	55	555	113
Z =	1.53	0.82	1.96	19.86	4.05
<hr/>					
TOTAL					
N =	2793	2793	2793	2793	2793
<hr/>					
Chi square =	77.58	36.46	253.68	80.99	264.76
<hr/>					
df =	24	24	24	24	24
<hr/>					
significance =	0.000	0.049	0.000	0.000	0.000
<hr/>					

TABLE 4: Satisfaction Scores Among Soviet Emigrants by Role in the Decision to Emigrate

"How satisfied were you with:				
Standard of Living	Housing	Goods	Job	Medical Care

Decision-maker		2.51	2.36	3.29	2.05	2.42
	N =	897	901	895	753	859
	Z =	32.12	32.26	32.04	26.96	30.76
Shared decision		2.42	2.27	3.28	1.96	2.36
	N =	1633	1646	1624	1324	1601
	Z =	58.47	58.93	58.15	47.40	57.32
Follower		2.20	2.11	3.02	1.72	2.05
	N =	207	209	206	151	206
	Z =	7.41	7.48	7.38	5.41	7.38
Average Score		2.44	2.29	3.26	1.97	2.36
SUBTOTAL						
	N =	2737	2756	2725	2228	2666
	Z =	98.00	98.67	97.57	79.77	95.46
Missing Values						
	N =	56	37	68	565	127
	Z =	2.00	1.33	2.43	20.23	4.54
TOTAL						
	N =	2793	2793	2793	2793	2793
Chi square =		40.61	18.31	31.20	22.41	26.81
df =		6	6	6	6	6
significance =		0.000	0.005	0.000	0.001	0.000

TABLE 5A: Satisfaction Scores Among Soviet Emigrants, by Ethnic Groups

	How satisfied were you with:				Compared with other Soviet people, was your material standard of living far above average...far below average for:	
	Standard of Living	Housing	Goods	Job	Medical Care	
Jewish						
N =	2.42	2.26	3.22	1.95	2.31	2.71
Z =	2244	2259	2235	1829	2199	2262
	80.34	80.88	80.02	65.49	78.73	81.0
Russian						
N =	2.53	2.42	3.44	2.09	2.59	2.62
Z =	376	378	371	300	357	378
	13.46	13.53	13.28	10.74	12.78	13.53
Ukrainian						
N =	2.37	2.36	3.22	2.09	2.29	2.57
Z =	51	52	51	44	48	52
	1.83	1.86	1.83	1.58	1.71	1.81.0
Other Titular Nationalities						
N =	2.53	2.65	3.45	2.08	2.50	2.60
Z =	19	20	20	13	20	20
	0.68	0.72	0.72	0.47	0.72	0.72
Other						
N =	2.38	2.20	3.43	1.94	2.64	2.34
Z =	60	61	61	52	56	59
	2.15	2.18	2.18	1.86	2.01	2.11
Average Score	2.43	2.29	3.26	1.97	2.35	2.70
SUBTOTAL						
N =	2750	2770	2738	2238	2680	2771
Z =	98.46	99.17	98.03	80.14	95.96	99.21
Missing Values						
N =	43	23	55	555	113	22
Z =	1.54	0.83	1.97	19.86	4.04	
TOTAL						
N =	2793	2793	2793	2793	2793	2793
Chi square =	20.83	21.26	26.11	30.16	38.25	50.25
df =	12	12	12	12	12	16
significance =	0.053	0.046	0.010	0.002	0.000	0.000

TABLE 5B: Satisfaction Scores among Soviet Emigrants, by Republic

	How satisfied were you with:				Job	Medical Care	Compared with other Soviet people, was your material standard of living far above average..far below average for:
	Standard of Living	Housing	Goods				
RSPSR							
N =	2.47	2.28	3.35	2.06	2.60	2.57	
Σ =	1268	1275	1254	1016	1227	1277	
	45.40	45.64	45.00	36.40	44.00	45.72	
Ukraine							
N =	2.44	2.33	3.26	1.93	2.20	2.82	
Σ =	669	676	667	547	659	673	
	24.00	24.20	24.00	19.60	23.60	24.1	
Western Slavic repu- blicas (1)							
N =	2.40	2.40	3.18	1.88	2.13	2.81	
Σ =	285	285	284	241	278	286	
	10.20	10.20	10.20	8.62	10.00	10.24	
Central Asian repu- blicas (2)							
N =	2.09	1.85	2.82	1.72	1.86	2.75	
Σ =	237	239	237	202	231	241	
	8.50	8.60	8.50	7.23	8.30	8.62	
Baltic republics (3)							
N =	2.56	2.51	3.36	2.02	2.22	2.71	
Σ =	156	156	156	127	151	156	
	5.60	5.60	5.60	4.54	5.40	5.39	
Transcaucasian re- publics (4)							
N =	2.53	2.40	3.21	1.92	2.37	2.77	
Σ =	135	139	140	105	134	138	
	4.83	5.00	5.01	3.80	4.80	4.94	
Average Score	2.43	2.29	3.26	1.97	2.36	2.74	
SUBTOTAL							
N =	2750	2770	2738	2238	2680	2771	
Σ =	98.50	99.20	98.03	80.12	96.00	99.21	
Missing Values	43	23	55	555	113	22	
TOTAL	2793	2793	2793	2793	2793	2793	
Chi square =	64.79	71.83	101.28	41.30	201.44	92.07	
df =	15	15	15	15	15	20	
significance =	0.000	0.000	0.000	0.000	0.000	0.000	

TABLE 6: Source of Housing

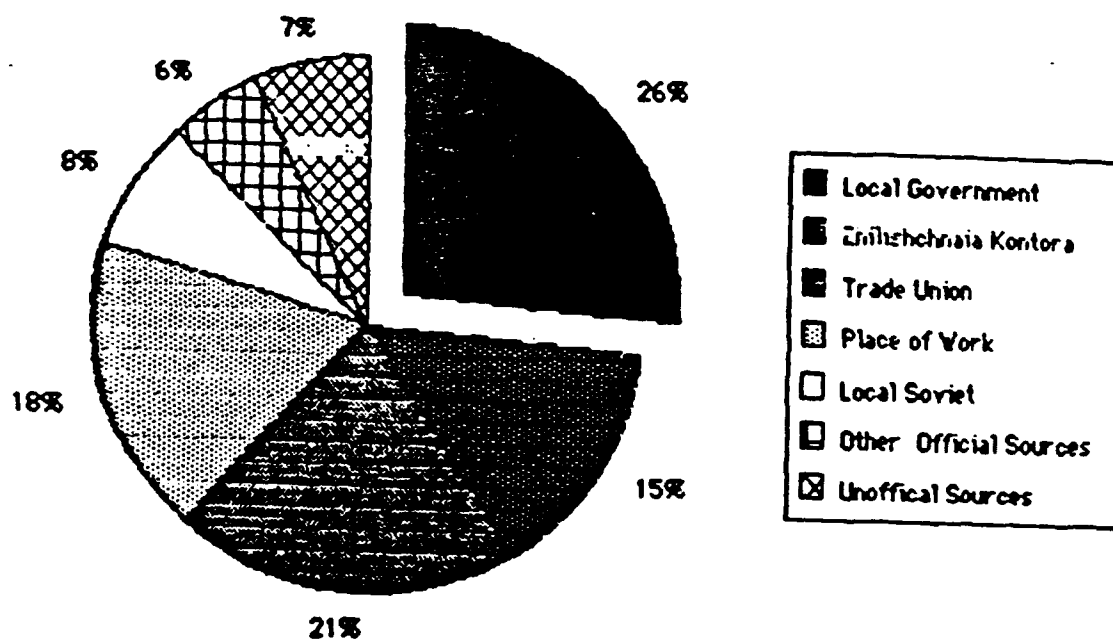


TABLE 7: Respondent's Housing

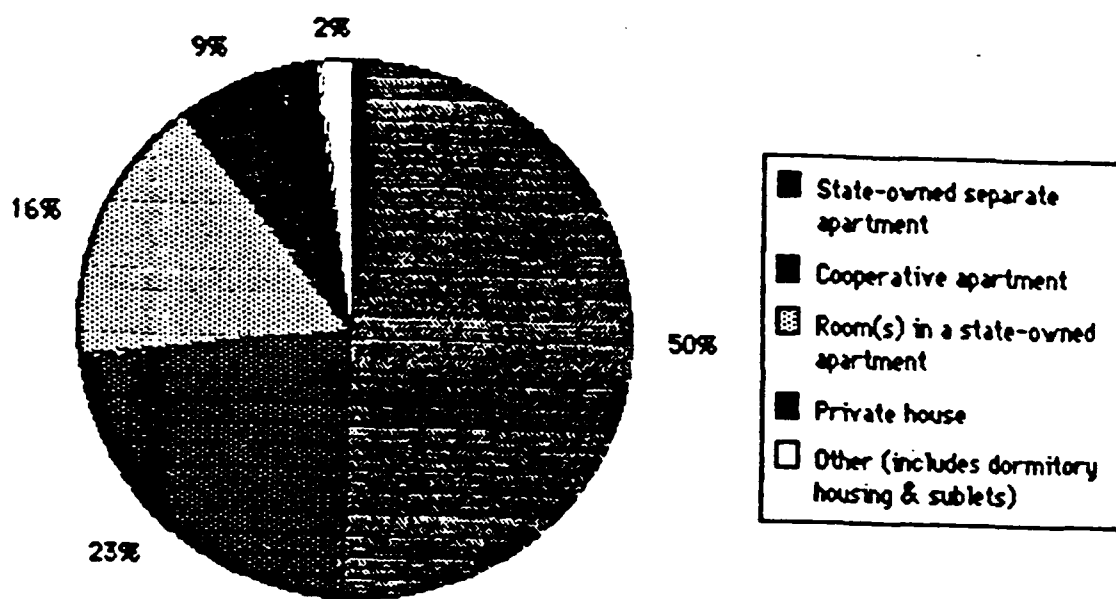


TABLE 8:

Satisfaction with Housing by Type of Housing

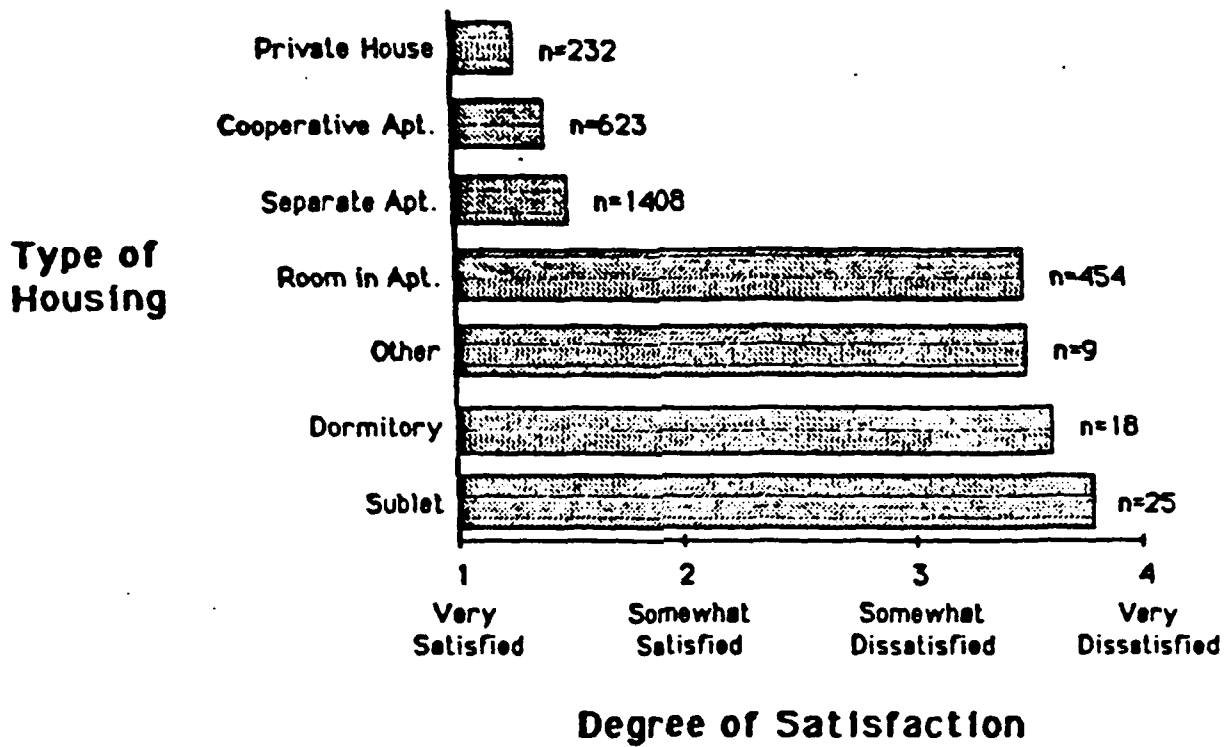


TABLE 9: Average Satisfaction Scores among Soviet Emigrants, by Capital City and Other Cities

"How satisfied were you with:					
	Standard of Living	Housing	Goods	Job	Medical Care
Capital Cities	2.45	2.27	3.27	1.99	2.42
N =	2076	2090	2069	1689	2020
Z =	74.3	74.8	74.0	60.5	72.3
Other Cities	2.37	2.34	3.20	2.00	2.12
N =	673	679	668	549	659
Z =	24.1	24.3	23.9	19.6	23.6
Average Score	2.43	2.29	3.26	1.97	2.36
SUBTOTAL					
N =	2749	2769	2737	2238	2679
Z =	98.40	99.14	97.99	80.13	95.92
Missing Values					
N =	44	24	56	555	114
Z =	1.60	0.86	2.01	19.87	4.08
TOTAL					
N =	2793	2793	2793	2793	2793
Chi square =	88.64	104.76	126.15	53.88	231.87
df =	33	33	33	33	33
significance =	0.000	0.000	0.000	0.000	0.000

TABLE 10: Dietary Frequencies: Meat, Cheese, Kefir, Milk, and Eggs

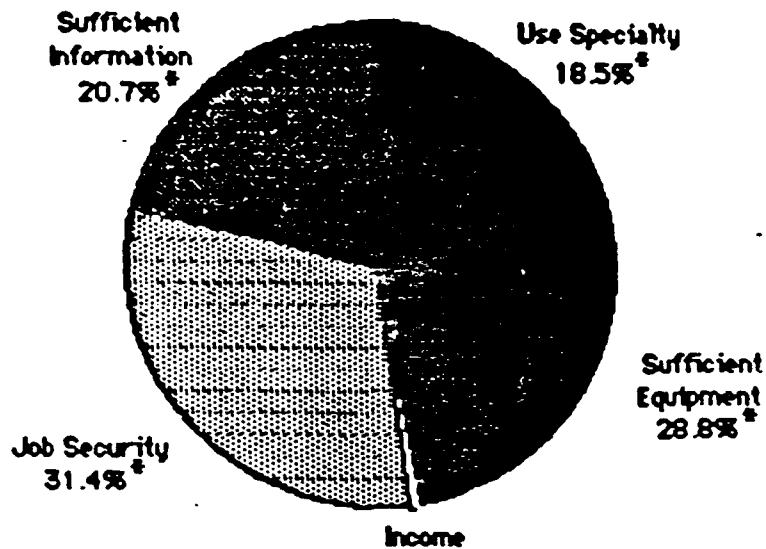
		"How often did you eat/drink:				
		Meat	Cheese	Kefir	Milk	Eggs
Frequency:						
Daily		N =	575	738	635	672
		Z =	62.4	80.0	68.9	72.9
Several times per week		N =	265	144	220	155
		Z =	28.7	15.6	23.9	16.8
Several times per month		N =	16	14	21	25
		Z =	1.7	1.5	2.3	2.7
Never:		N =	56	19	35	63
		Z =	6.1	2.1	3.8	6.8
SUBTOTAL		N =	918	919	917	919
		Z =	99.00	99.00	99.00	99.00
Missing Values		N =	4	3	5	3
		Z =	0.4	0.3	0.5	0.3
TOTAL		N =	922	922	922	922

TABLE 11: Monthly expenditures, by Satisfaction with Material Goods (Quartile scores)

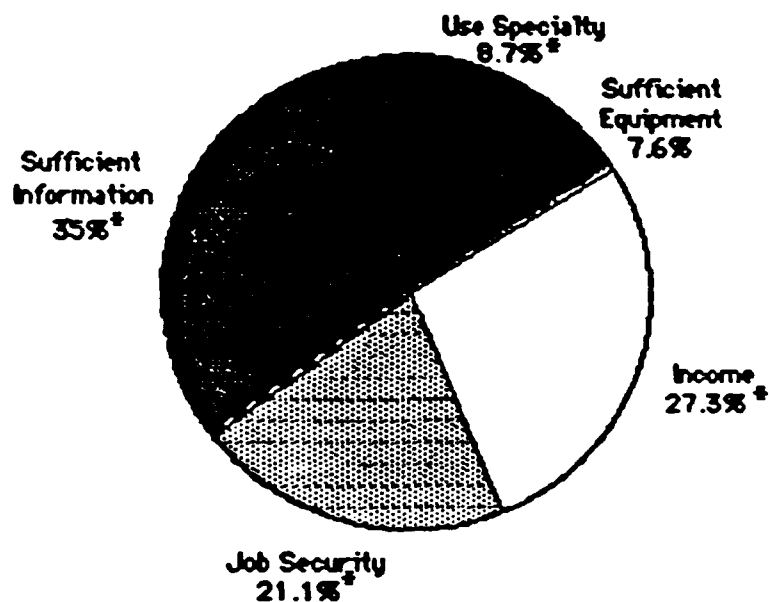
Expenditures (in Quartiles)*	"How satisfied were you with material goods?"			
	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
Household Expenditures	2.53	2.18	2.25	2.51
Rynok Expenditures	2.73	2.44	2.40	2.49
Nalevo Expenditures	1.78	1.76	1.95	2.28
N =	139	488	634	1477

*Expenditures are shown in quartile scores,
where 1 = lowest expenditures
4 = highest expenditures.

**Figure 12A:
Sources of Job Satisfaction,
All Workers**



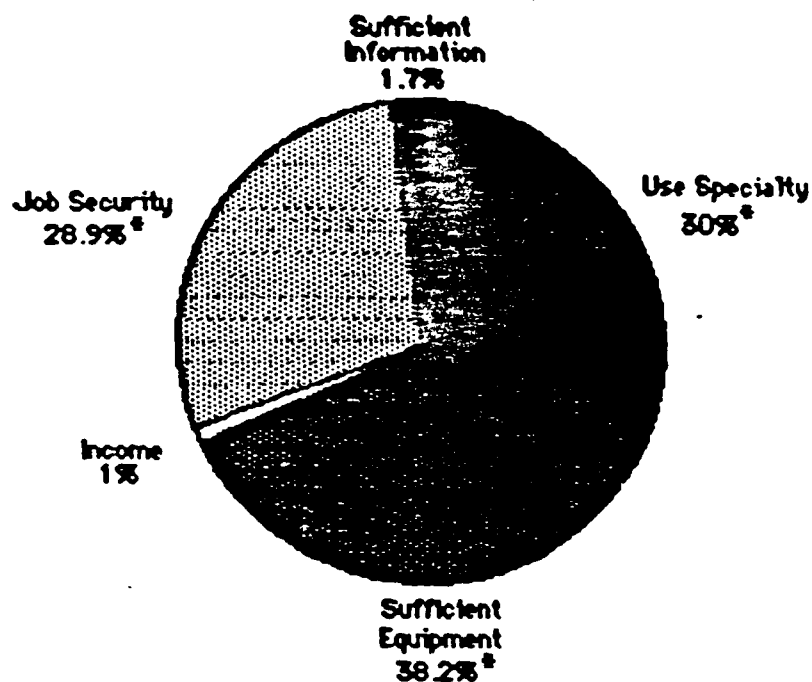
**Figure 12B:
Sources of Job Satisfaction,
Professional Workers**



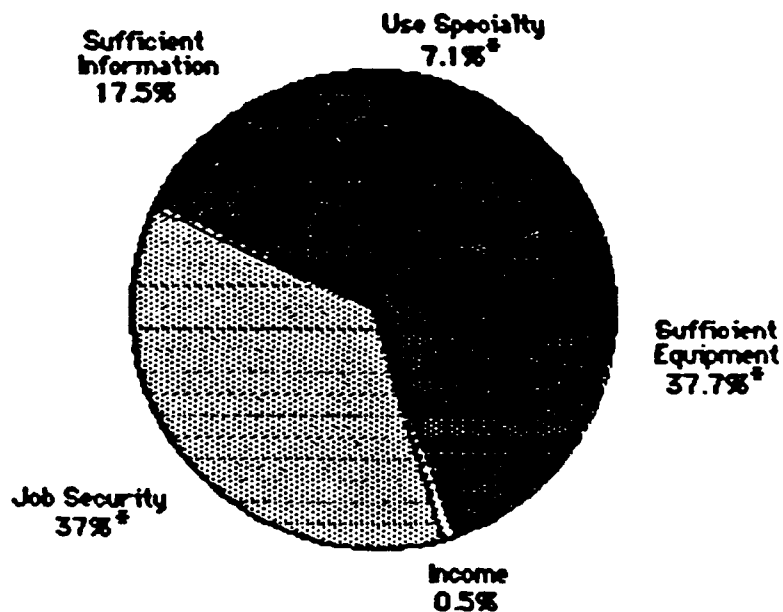
Use Specialty
 Sufficient Equipment
 Income
 Job Security
 Sufficient Information

* Statistically Significant at the 0.05 level

**Figure 12C:
Sources of Job Satisfaction
White Collar Workers**



**Figure 12D:
Sources of Job Satisfaction,
Blue Collar Workers**

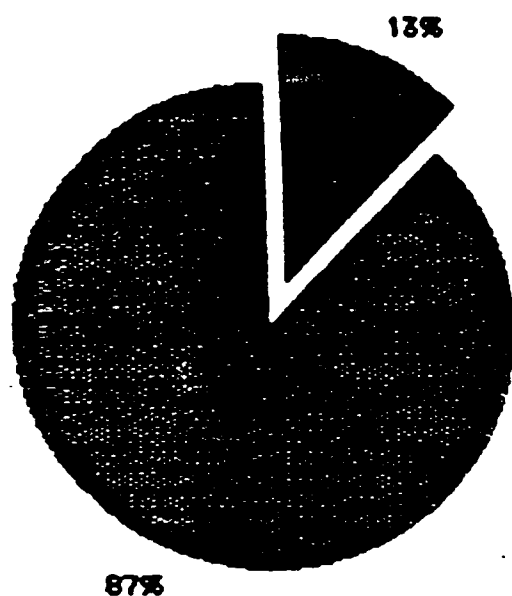


Use Specialty
 Sufficient Equipment
 Income
 Job Security
 Sufficient Information

* Statistically Significant at the 0.05 level

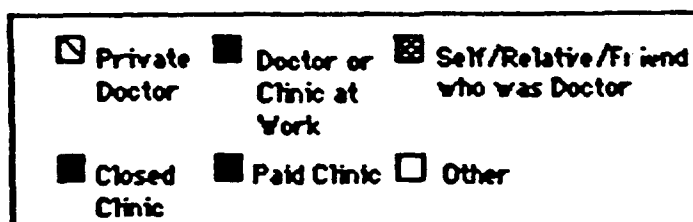
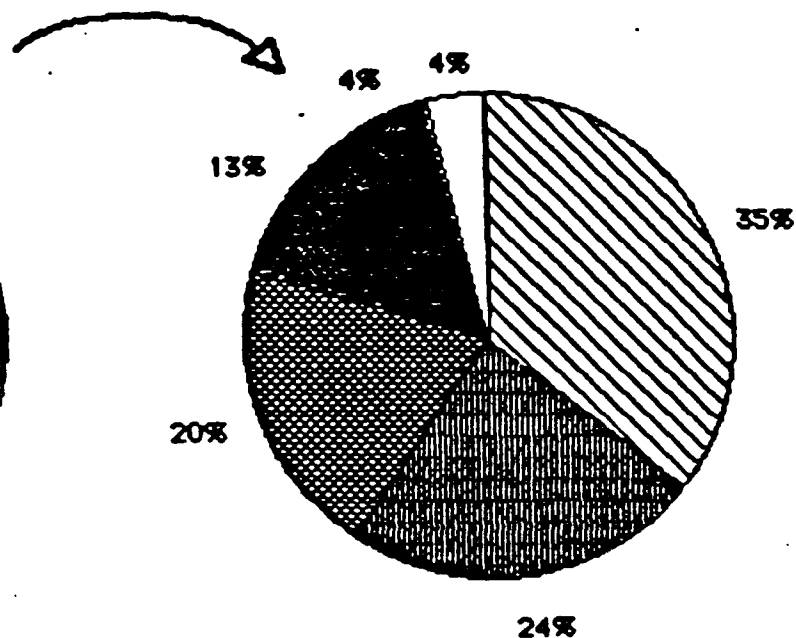
TABLE 13: Source of Medical Care

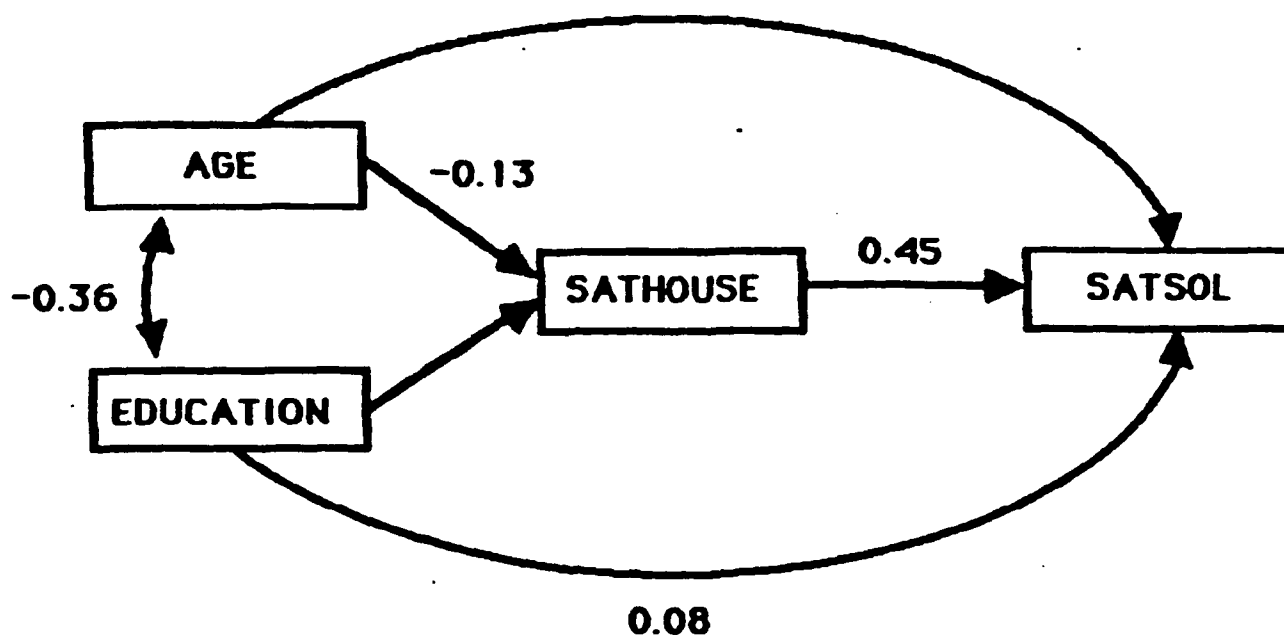
All respondents



■ Polyclinic ■ Other

... of the 13% responding "other"

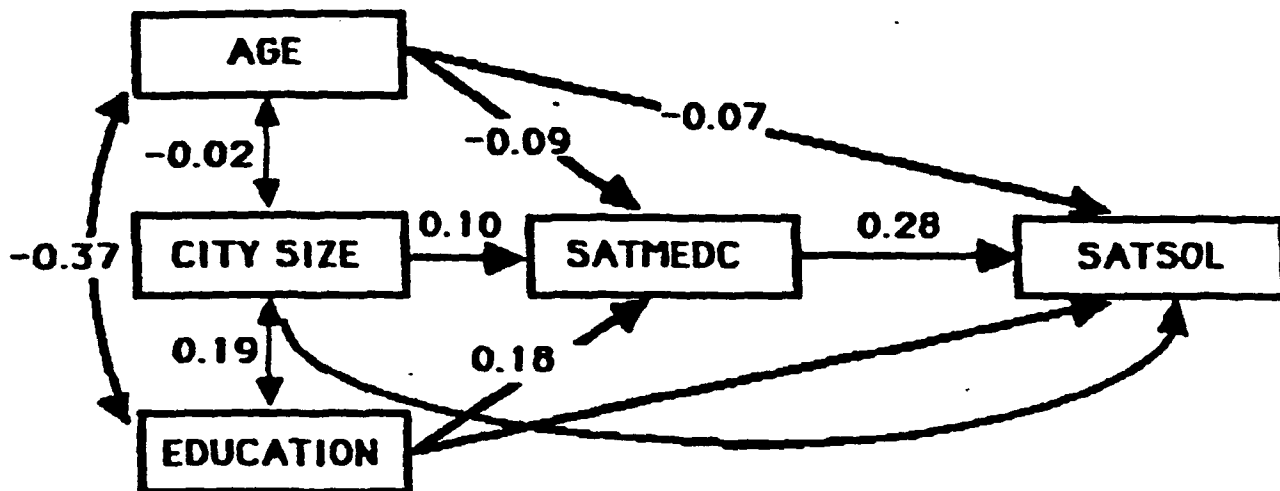




INDIRECT EFFECT OF AGE THROUGH SATHOUSE

$$= (-0.133) \times (0.454) = -0.0604$$

CHART 1: Path Analysis of Satisfaction with Housing.



INDIRECT EFFECT OF CITY SIZE ON SATSOL

$$= (0.106) \times (0.286) = 0.0306$$

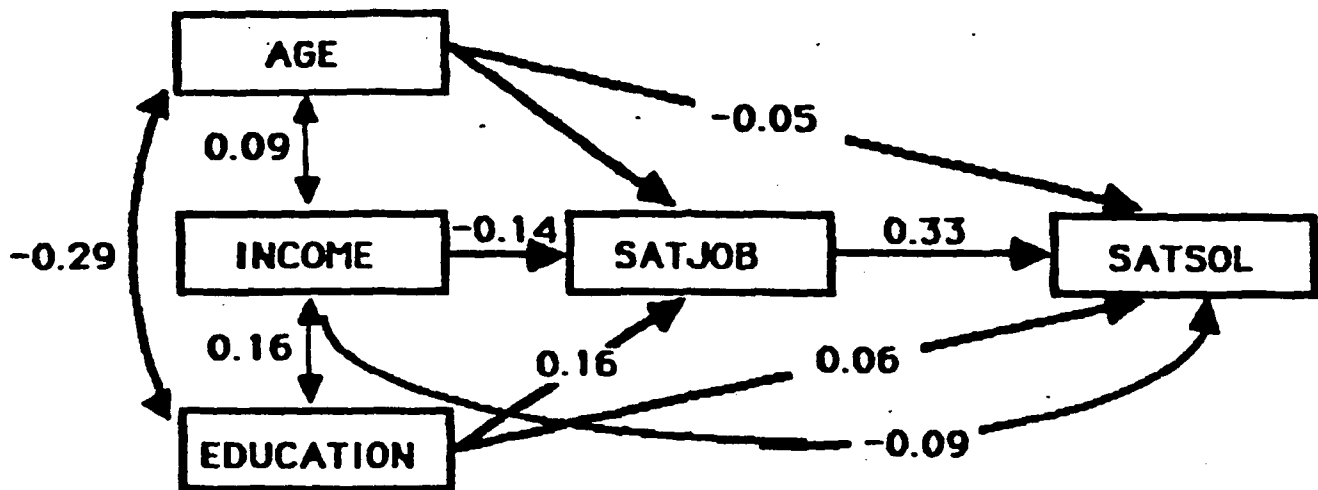
INDIRECT EFFECT OF AGE ON SATSOL

$$= (-0.095) \times (0.286) = -0.0273$$

INDIRECT EFFECT OF EDUCATION ON SATSOL

$$= (0.182) \times (0.286) = 0.0524$$

CHART 2: Path Analysis of Satisfaction with Medical Care.



INDIRECT EFFECT OF INCOME ON SATSOL

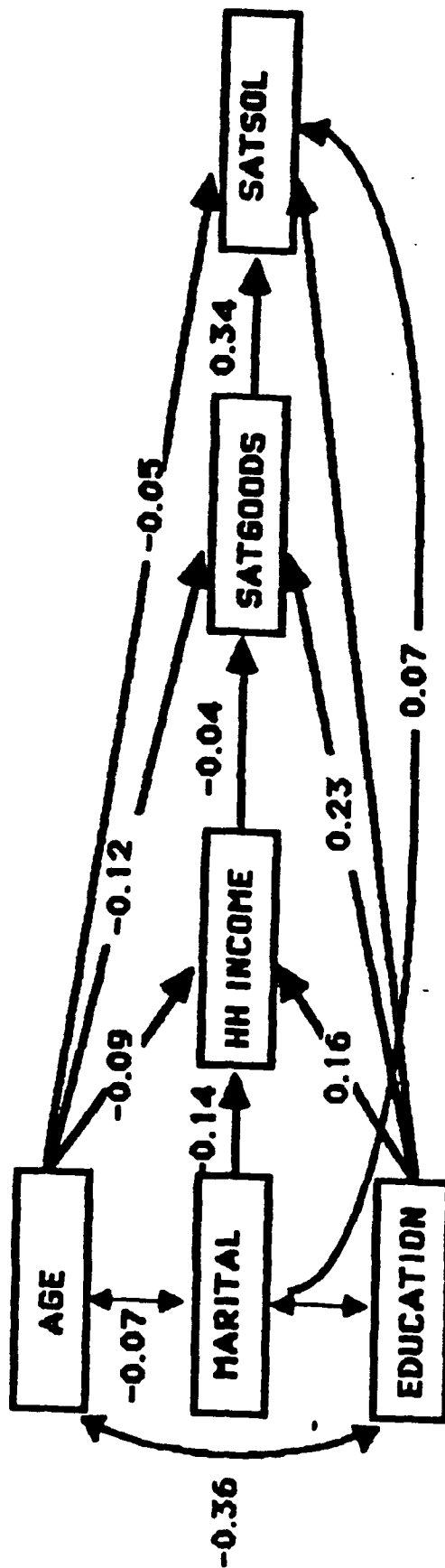
$$= (-0.14219) \times (0.33999) = -0.04834$$

INDIRECT EFFECT OF EDUCATION ON SATSOL

$$= (0.16210) \times (0.33999) = 0.055112$$

CHART 3: Path Analysis of Satisfaction with Job.

CHART 4: Path Analysis of Satisfaction with Availability of Goods.



INDIRECT EFFECT OF MARITAL ON SAT600DS = 0.0059
 INDIRECT EFFECT OF EDUCATION ON SAT600DS = -0.0068
 INDIRECT EFFECT OF AGE ON SAT600DS = 0.0040
 INDIRECT EFFECT OF MARITAL ON SATSOL = 0.0020
 INDIRECT EFFECT OF EDUCATION ON SATSOL = -0.0024
 INDIRECT EFFECT OF AGE ON SATSOL = 0.0014

POLITICS: SOURCES OF REGIME SUPPORT

ACKNOWLEDGEMENT

I would like to thank Joe Berliner, Thane Gustafson, Bogdan Harasymiw, David Lane, James Millar and Brian Silver for comments on an earlier version of this paper. I would also like to thank Gary King, Bert Holland, and George Sharrard for assistance with the analysis, and Nasrin Abdolali for help in preparing the manuscript.

Donna Bahry

POLITICS, GENERATIONS AND CHANGE IN THE USSR

Given the turbulence of Soviet history since 1917, students of Soviet politics have looked to the rise of new generations as a key source of change in the USSR. Upheavals from the Revolution and Civil War, through collectivization to World War II and de-Stalinization all created markedly divergent conditions in which succeeding generations have come of age. Life experiences and opportunities vary so much that new generations--among the leadership and the population alike--should have different political values and expectations of the Soviet system. If formative experiences shape adult political orientations, the terror of the 1930s should have left its mark on the Stalin generation, just as the thaw of the post-Stalin era should have created a less fearful and more critical cohort. Thus the process of generational replacement could give a different cast to the Soviet political landscape. To borrow Karl Mannheim's (1972) phrase, generational differences may be fundamental guideposts for understanding social and political change in the USSR.

Yet we have little empirical evidence on how the members of succeeding age groups vary in their relationship to the Soviet system--how the regime engages the members of each generation, or how they respond. Nor has it been possible to disentangle the political impact of rising

educational levels and occupational attainments from the effects of generational replacement.

This chapter is a first attempt to explore the political "generation gap" at the individual level, using interviews with recent emigrants conducted by the Soviet Interview Project, to assess age cleavages in political involvement. How does behavior vary among those who came of age in the purge era, during World War II, in the postwar and in the post-Stalin eras? Are there measurable differences in the willingness to conform to official expectations of political activism or to engage in unconventional behavior? The SIP survey, with its 2667 voting-age respondents,¹ allows us to assess potential age cleavages by examining each individual's involvement in Soviet elections, public organizations, and contacts with public officials, as well as in unsanctioned activities such as study groups, protests and strikes.

I chose to focus on respondents' behavior for several reasons. First, asking people what they actually did helps to minimize possible recall problems. Interviews centered on an individual's life in the last five years before it was disrupted by plans to emigrate (in the survey, this was referred to as the "last normal period" or LNP); and given the lag between the time of emigration and the time of the interview, respondents should find it easier to recall specific activities than to recall more general reactions to the Soviet system.² In fact, focusing on behavior strengthens the case for the accuracy of recall on

subjective questions. If a compelling pattern emerges in the data on individual behavior, and if it corresponds to a similar pattern in attitudes, then we can have more confidence in items tapping a respondent's subjective evaluations.

Second, concentrating on behavior offers a stringent test of generational differences. Any individual may dislike some or all aspects of the system, but since the regime expects public conformity, the willingness to act in non-approved ways offers stronger evidence of deviations from the Soviet model of an active but compliant citizen. And, given the costs of nonconformity, we should expect to find relatively few differences in unconventional activity among generations. Therefore, to the extent that we do find a generation gap in public behavior, it offers more powerful evidence of a fundamental cleavage.

To assess the degree of individual political involvement, the questionnaire included items about a range of activities from voting and election work, participation in public organizations, and contacting to strikes and protest. The survey thus asked about behaviors requiring varied political resources, imposing different costs on the participants, and in some cases (e.g., contacting the authorities) offering benefits as well. ³

However, certain types of behavior cluster together, and this suggests an underlying pattern of activity that spans only a few basic modes of political involvement. Respondents who were active in public organizations were

also likely to work in an election campaign; those who engaged in nonconformist political acts were also likely to avoid voting, work privately and attend religious services; those who contacted a party or government official were also more likely to write to the media; and those who expressed an interest in politics were also more inclined to listen to Western radio broadcasts. The different activities, when subjected to a factor analysis, thus yield four basic political roles:⁴

- o compliant -- people engaged in what Brzezinski and Huntington (1965) labelled "mobilized participation," or involvement in public organizations such as housing commissions, voluntary police and fire protection, trade union committees, and the Komsomol, and work in election campaigns;
- o spectator -- people with a self-defined high degree of interest in politics and public affairs (and who are more inclined to listen to Western radio);
- o parochial -- people whose activity focuses on gaining individual benefits or redress by contacting public officials or the media (DiFranceis and Gitelman's (1984) "covert participation in policy implementation");
- o nonconformist -- people who took part in protests, strikes, unsanctioned study or discussion groups, religious observances, or private work, and who did not vote.⁵

Political involvement can best be conceptualized not along one single dimension, but along several, each with a distinct focus, and each with a potentially different clientele. In light of the distinctions, my analysis will deal with these four dimensions separately.

The Validity of Emigrant Responses

None of the discussion thus far is meant to argue that the level of either conventional or unconventional activity in the sample can be taken to represent the actual levels in the Soviet Union as a whole. Respondents are more educated and more urban than the average Soviet citizen; they are far from representative of the Soviet ethnic mix; and, of course, they quit the USSR. Yet their responses say a great deal about the structure of generational differences--about the gaps between the highly educated and the less educated, between men and women, and so on. If the goal of social science is to discover the patterns in behavior and attitudes, a carefully balanced sample with carefully constructed questions can speak volumes about the connections between age and education, political activity, and a host of other fundamental political issues. And it is the structure of such political relationships that concerns us here.

The critical question is whether the patterns of behavior and attitudes among emigrant respondents allow us to make inferences about political activity in the USSR.

How valid is it to generalize back to the Soviet system?

The data can be judged by three separate criteria--the logic and coherence of responses within the survey, the fit between SIP and Soviet survey results, and the conformity of the results with empirical theory on political behavior.

The first standard is internal, relying on the biases we would predict in an emigrant sample as a baseline for measuring political behavior in the Soviet Union. We would expect respondents to be negative towards the system and nonconformist in their behavior. If we then find a relatively high degree of compliant activism and little nonconformity, we can conclude that conventional activity is likely to be even greater, and nonconformity even less, in the USSR. A second, external criterion for assessing the data is the degree to which responses correspond to Soviet findings. If the patterns match, in spite of the differences in sample selection and in the conditions under which interviews took place, then the data support inferences about behavior in the USSR. Finally, the third critical standard for evaluating the responses is how well the data correspond to established theories of political action. Data that fit not only what we know of the Soviet system but also what we would predict from the empirical study of political behavior make the case for validity even stronger.

The responses are encouraging on all three counts. In spite of the unrepresentativeness of the sample and the fact that each individual "voted with his feet," the picture of

individual activity that emerges from these respondents is far more conventional than unconventional. Nearly twenty percent served as leaders or activists in public organizations ranging from housing and parents' committees, to druzhiniki, to the Komsomol during the years just before they applied to emigrate.⁶ Another thirty percent were among the rank and file of such conventional political groups. In contrast, only two percent took any leading role in protests or other overt unconventional political acts; and ten percent more engaged in at least one such activity during their LNP.⁷

However, behavior varied among individuals with different ethnic backgrounds. Jewish respondents engaged far less in political dissent, while nonconformity was much more common among the other nationalities represented in the sample (chiefly Russians). This may simply reflect an ethnic distinction in conventional political behavior--as exemplified by the fact that the Soviet Jewish population had the highest party saturation rate of any ethnic group up through the mid-1970s. (Jacobs, 1976, 1978, 1980) But the ethnic split here more likely reflects the fact that Third Wave emigrants had essentially only two tickets out of the USSR, one based on nationality and one based on political dissidence. In either case, the potential for ethnic bias must be considered in any assessment of respondents' political activities and attitudes, and all of the results below are presented with an eye to such biases.⁸

The responses also reveal another important distinction

in nonconformist behavior, related to the decision to emigrate. Individuals who engaged in unconventional activities were more likely than others to make the decision to emigrate themselves, while "compliant" respondents typically shared in or played no part in the family's decision to leave the USSR.⁹ Thus the number of nonconformists in the sample could be influenced by a selectivity bias: it may include a disproportionate share of a relatively small, disgruntled group--people who actively wanted to emigrate. And respondents who did not themselves make the decision may therefore be more similar to the population that remained in the USSR. If so, then a respondent's role in the family's decision to leave should be an important variable in assessing the biases within the sample.

Validation through external sources is more difficult, given the dearth of comparable Soviet surveys. Yet the available data confirm the basic patterns in SIP responses. Thus, for example, Soviet analysts reveal a gap in political participation, with college graduates far more heavily engaged in compliant political activism (obshchestvennaia rabota) than are individuals who had only primary or secondary schooling. (See Figure 1) SIP data yield much the same conclusion: the highly educated turn out to be nearly twice as

active as are respondents with a general secondary education or less.¹⁰ Both Soviet findings and SIP data also reveal a connection between higher occupational status and greater compliant activism. (Ikonnikova and Lisovskii, 1969)

Even more important for our purposes, Soviet results confirm the levels of Komsomol saturation reported by different generations in the sample. Thus according to Kogan and Pavlov's (1976) study of two generations of workers in heavy industry (one group 30 years old or younger, and a second group 50 and over) the young had a higher rate of Komsomol membership than the old did decades earlier. The same age gap emerges among SIP respondents--especially among the men, as we would expect since Kogan and Pavlov's sample was drawn from a predominantly male industry. (see Table 1a) Both sets of data also match Fainsod's (1964) account of the Komsomol's evolution: from an elite organization up until the 1930s, to an emphasis after 1936 on broadening mass membership.

INSERT TABLE 1

Soviet survey results should of course be interpreted with care, since procedures for drawing the samples and conducting the interviews are not always clear. Yet the variation in Soviet procedures makes SIP responses all the more compelling: the patterns basically match, even in the face of divergent methods, the different political atmosphere in which interviews were conducted, and the

difference in samples between citizens who left and those who stayed.

One other external source can also be brought to bear in assessing the data: the interviews conducted by the Harvard Project shortly after World War II. Although they did not include all of the same questions on what we have labelled as compliant and nonconformist activity, they did ask about Komsomol membership, allowing us to compare individuals from the same generations interviewed over thirty years apart. The samples, of course, are much different--the Harvard Project respondents were primarily Russian and Ukrainian, as likely to come from rural as from urban areas, and the interviews were conducted in displaced persons camps after the war; while SIP respondents, predominantly Jewish and urban, were interviewed in their homes in the U.S. Once again, however, these differences turn into an advantage, for the levels of Komsomol saturation as reported by the two different samples are nearly identical.¹¹ (See Table 1b.)

The third criterion for judging the data, conformity with theory, adds still more evidence on the basic validity of the responses. The most careful cross-national studies show that political involvement covers a broad spectrum of activities, each demanding different resources from participants and each with different implications for the political system. (Verba and Nie, 1972; Verba, Nie and Kim, 1978; Barnes and Kaase, 1979) Voting, for example, demands few resources (e.g., little commitment of time or funds)

from any one participant, but conveys only a diffuse message about the voter's policy preferences to candidates and parties. Compared to individuals who go to government to appeal or complain, work in campaigns, or take part in community groups (among other political activities), voters incur fewer costs but also have fewer opportunities to articulate individual concerns or demands to political elites. At the other end of the spectrum, protest imposes greater costs, and is less frequent than either voting, work in political organizations, or contacting. The pattern proves to be a common one, resembling the curve for West Germany presented in Figure 2.

INSERT FIGURE 2

The incidence or distribution of these political activities among SIP respondents proves to be very similar.¹² Voting, which requires the fewest resources, is far more common than engaging in an election campaign, taking an active role in a public organization, or contacting the authorities; and unconventional activity is even less common. (See Figure 2b)

Not only does the relative frequency of different acts correspond to theory about political involvement; so, too, does the structure of political action. Comparative research on participation reveals consistently that diverse political activities basically represent only a few underlying types of involvement, which impose different

demands on the participant and on the political system, and appeal to different clienteles: voting, campaign activity, collective but non-partisan action, individual contacting of political authorities, and protest (Verba, Nie and Kim, 1978; Barnes and Kaase, 1979; Welch, 1975). The factor analysis described above yields a very similar picture among SIP respondents, with four modes of political involvement--compliant, spectator, parochial, and nonconformist. In the Soviet case, election work does not constitute a separate factor, since elections serve as extensions of more general mobilized participation. And since it takes some initiative not to vote, non-voting (or allowing someone else to cast the ballot) clusters with other forms of unconventional behavior.

Needless to say, the many other questions in the survey require similar tests before we can accept them as legitimate measures of individual behavior and attitudes. For our purposes, the relatively conventional nature of the sample, the conformity with external data from the Harvard Project and from Soviet surveys, and the close fit with empirical theories of political behavior all help to increase confidence in responses on political activity.

The Concept of Generational Change

The problem of generations, as Mannheim called it, has come to be a controversial issue for Western and Soviet scholars alike. All concede the distinctiveness of

different age groups, but there is little consensus on the nature or political implications of the generation gap. Among Western researchers, much of the discussion of Soviet generations focuses on elites, and on their distinctive formative experiences. Jerry Hough (1979) argues, for example, that fundamental changes in both the educational system and the political climate produced different experiences and career opportunities for each successive age group. Thus the "Brezhnev generation," born between 1900 and 1909, benefitted from dizzying career mobility during the purges, often with formal but hardly rigorous schooling. In contrast, the purge generation, born between 1910 and 1918, entered the schools in time to face the more stringent and rigorous demands of the educational system during Stalin's "Great Retreat," but began their careers too late to benefit from the political dislocations of the purges. Those who came of age during the War (born between 1919 and 1925) experienced both the wartime sacrifices and the limited opportunities for education they caused. Finally, the postwar generation (born between 1925 and 1940) entered school and began their careers not only in a freer political atmosphere but also in a system where education had been upgraded and had become more rigorous. As Hough concludes, it is the joint impact of age and specific educational experiences which sets generations apart. Seweryn Bialer (1980) offers a similar typology, distinguishing among the purge generation (who came of age in the 1930s), the wartime generation (who entered the political arena during World War

II), and the post-Stalin generation (who came of age since the War.) And Jeremy Azrael (1966) begins with an earlier cohort, but suggests a comparable fourfold categorization of political generations among industrial specialists and managers.

If formative experiences do influence each generation's political orientations, we should find similar cleavages in the mass population. The political terror, the dislocations of World War II, and the attacks on Stalinism that set elite generations apart also shaped the political environment, education and career opportunities for nonelites.

However, few researchers agree on the political implications of the generation gap among the mass public. Jonathan Harris (1971) suggests, for example, that willingness to criticize the regime divides into those with first-hand experience of Stalinism versus those for whom the Stalin era is only history. Other authors (Connor 1975; Brzezinski and Huntington 1966) question the substance of such criticism, viewing the divergence between young and old in the USSR chiefly as one of lifestyle--a gap between traditional preferences versus Western music, clothing, and pop culture. Generational differences should therefore embody little or no political content.

Even if they did, the impact should be minimized by pervasive mobilizing institutions such as the schools and the Komsomol, dedicated to insuring public conformity and keeping the younger generation compliant (Kassof 1965). As

Connor (1975:21-22) explains,

The combined machinery of tightly controlled youth organizations and a traditional, non-permissive educational system focused on the "adult" concern of preparation for the world of work...has had its effect. The social space in which Soviet youth might develop its own group consciousness, its own set of political orientations, has been tightly circumscribed by that machinery.

If some people manage to slip through this machinery of control, the regime--as both Connor and Bialer suggest--has blunted the political impact with slow but steady improvements in the standard of living, buying acquiescence and managing popular expectations. Bialer (1980:163-4) sums up the argument by noting that

for the average Soviet consumer [the] reference point is neither the West nor even Eastern Europe but his own past....Comparison with this past can only heighten approval of ongoing improvements and temper expectations.

From this perspective, as Bialer suggests, the record of the Brezhnev era can be considered a success.

For Soviet authors, the political implications of the age gap raise a similar controversy. That generations are

distinctive is virtually a foregone conclusion, with many researchers treating the rise of new cohorts as the driving force behind social progress. Formative experiences early in life are viewed as critical, as sociologist Iu. E. Volkov (1972:336-7) explains:

The period of youth is the period of forming a new member of society and of a specific class--a citizen, a worker. Social activism created in youth, as a rule, remains during one's whole life, creating an active builder of communism through all successive stages of one's life.

Yet Soviet studies of aging and politics are contradictory. Researchers describe new generations as more politically active and aware than their fathers and grandfathers; but also as less committed and less active than previous generations. Volkov (1972), for example, contends that contemporary young people exhibit a higher-than average level of political commitment. And N. M. Blinov (1983:6) takes the argument even further, contending that "contemporary Soviet youth" are characterized by an increasing social activism. But virtually every study also emphasizes shortcomings in the political socialization of new generations, castigating the young for narrowness, putting selfish interests ahead of the collective, and preferring petty consumerism over work for society at large. Komsomol members participating in one Soviet survey (Blinov

1983) reported that their contemporaries within the Komsomol are ideologically shallow, and Leonid Brezhnev (1981), in his remarks to the Twenty-Sixth Party Congress, lamented the political naivete and less-than-professional attitude toward work that characterize "some young people." More recently, a Central Committee decree complained that Soviet youth were preoccupied with Western fashions and politically apathetic. (Tolz 1984)

Thus Soviet research leads to the conclusion that the young are both more mobilized and less mobilized than their fathers and grandfathers. However, empirical evidence to support either view is limited. Most Soviet studies of age differences focus exclusively on youth, with little attention to the attitudes or behavior of older cohorts. Survey samples typically encompass only respondents age thirty or younger, precluding any direct evaluation of intergenerational cleavages. (see, e.g., Vershlovskaja and Lesokhina 1975; Gorshkov and Sheregi 1979; Ikonnikova and Lisovskii 1969) And while Soviet assessments offer some intriguing evidence on the political activities of young people, they seldom explore in depth the causes behind different levels of activism or the attitudes that distinguish the active from the non-active.

There is, then, a consensus among both Soviet and Western researchers that age matters, but substantial disagreement over the content of the generation gap and its impact on the political system. The literature leaves us with two basic questions: 1) how, and how much do age

groups differ? and 2) what is the political content of the generation gap?

Defining Generations

To speak of a generation gap implies a definition of where each cohort begins and ends, a set of specific age groups that are sufficiently similar in their behavior and sufficiently unlike previous or successive ones to warrant the use of the term "generation." Yet defining the cutpoints is never an easy task. As Mannheim emphasized, in the absence of major changes in the social or political environment, not every cohort emerges with a distinctive outlook; and even when one does, the exact boundaries between generations may still be difficult to identify without a well-defined theory.

In the Soviet case, political upheavals have been so pronounced that researchers are in substantial agreement over the basic cutpoints, diverging chiefly over the number of age groups they identify and the group with which they begin. For our purposes, the first cohort in the sample is a given, since the sample design allowed only for respondents who were between the ages of 20 and 70 at the time they arrived in the U.S. The oldest individuals in the sample thus belong to the "Brezhnev generation" that Hough identifies. As for the number of generations to be analyzed, the best scheme empirically is the one with the greatest number of categories, since it allows us to test

for more potential cleavages. I therefore rely on Hough's cutpoints to define age groups, with a fifth category added to incorporate respondents born after 1940. My generational scheme and the corresponding frequencies are as follows:¹³

<u>Age Group</u>	<u>Frequency</u>
the Brezhnev generation- born 1900-1909	34
the purge generation - born 1910-18	396
the wartime generation - born 1919-25	301
the post-war generation - 1925-40	879
the post-Stalin generation - 1941-60	1057

Assessing the differences among these five groups also raises a fundamental question about how to interpret generational cleavages. Almost any survey sample will exhibit differences based on the age of the respondent, but an interview conducted at only one point in time makes it difficult to separate generational versus life-cycle effects. The distinction is crucial, as Philip Converse (1976) argues, for it bears not only on the explanation for age differences but also on our ability to predict the consequences of generational replacement. If a life-cycle process dominates, and the activities and attitudes of the young gradually come to resemble those of older generations, the entrance of new cohorts into political life and the disengagement of the old should balance each other out. Replacement alone will have little net effect on mass activism and beliefs. On the other hand, if each generation

has a unique political profile that endures with age, then replacement can lead to a transformation of mass politics.

The problem of distinguishing between the two explanations has stimulated a lively debate in the social sciences, and the results suggest that it would be inaccurate to single out only one explanation for age-related political differences. Work by Abramson and Inglehart (1984), Jennings and Niemi (1981), Verba and Nie (1972) and others reveals that generational change is a complex process that involves both components. Each age group takes on some new roles at different stages in the life-cycle, but each one also diverges markedly from younger and older groups in other ways, because of the era in which it came of age. Age differences grow out of the combination of life-cycle and cohort or generational effects, which come into play differently depending on the type of political activity or value in question (Jennings 1976).

Nie, Verba and Kim (1978) demonstrate, for example, that conventional involvement in seven nations follows an inverted u-shaped curve: the very young and the very old participate least. The young have yet to assume the adult roles that generate political activity; the old experience a slowdown in participation because of declining health, disengagement from the workforce, and limited mobility.

Yet while some types of activity follow the life cycle, other political characteristics tend to be relatively stable with age. Each new generation in the US has, for example, come into the electorate with a distinctive profile of party

identification, and has continued to be distinctive through successive elections and successive stages in the life-cycle. (Converse 1976; Jennings and Markus 1985; Markus 1983) The old stereotype of younger voters turning increasingly to Republicanism (and, by implication, to conservatism) as they age has proved to be a myth.

In similar fashion, panel or two-wave studies of political nonconformity from the 1960s onward reveal that young civil rights activists interviewed again after several years continued to hold distinctive political views in spite of the aging process and in spite of passage through different stages of the life-cycle. Compared to other members of their generation, individuals who protested in the 1960s were still radical and still active in both conventional and unconventional politics years later. (Fendrich 1974; Jennings and Niemi 1981)

We need not, however, rely solely on findings from Western systems to judge trends in the USSR. SIP data allow us to test for life-cycle versus generational effects directly, by comparing the activities of different cohorts when they were the same age; and by assessing the impact of various roles--such as employment, marriage, having children--that correspond to different stages in the life-cycle. If a life-cycle process dominates, each generation's behavior should match the activities of others at the same age. Levels of political activity should also change with each individual's passage through various adult roles. On the other hand, if formative experiences shape political

activism, then there ought to be no smooth progression in activity from young to old; assumption of different adult roles should have little impact; and generations should exhibit different levels of activity even at the same age.

The Paradox of Generations

Plots of the different political roles among the five age groups (Figure 3) reveal that the Soviet generation gap is indeed political, with the five groups diverging substantially in compliant behavior, nonconformity, and political interest. In each case, the postwar and post-Stalin generations prove to be the most active: the most interested in public affairs, the most heavily engaged in "mobilized participation," but at the same time taking a greater part in unsanctioned study groups, protests, strikes and other unconventional activities. Soviet ambivalence about the young would thus appear to be well-founded. The last two cohorts are both more compliant and more unorthodox than are older groups. Only contacting of public authorities and media (parochial activity) proves to be unrelated to age.

INSERT FIGURE 3

Compliant Behavior. In one sense, the responses indicate that the system has worked well to insure that it mobilizes ever greater numbers of new entrants into political life.

The postwar and post-Stalin cohorts are almost twice as likely to belong to at least one group, and twice as likely to take a leading role than are their fathers and grandfathers. There is, however, a degree of specialization by age, with the two youngest generations heavily engaged in the Komsomol but less involved in other organizations. One reason appears to be that many other organizations are geared to specific adult roles: parents' committees attract people with school-age children; housing or repair commissions include citizens who have their own rooms or apartment. There is also something of a tradeoff between joining the Komsomol and joining other organizations: for someone aged 14 to 28 who wants to demonstrate political trustworthiness, the Komsomol is simply more accessible--and for many, unavoidable.

Yet the tradeoffs among different organizations do not explain why the total level of compliant activism differs so radically between young and old. We might hypothesize that the gap stems from the life-cycle, where the younger the individual, the fewer the obligations of family and work--and, perhaps, the greater the optimism about political life. Aging might thus produce some erosion of political activity. The responses, however, suggest a very different process, since the postwar and poststalin generations are also more highly mobilized than their fathers and grandfathers were at the same age. As Figure 4 shows, only a small percentage of the older generations (chiefly men with higher education) joined the Komsomol in their youth, while nearly three-

fourths of the postwar and postStalin cohorts

INSERT FIGURE 4

joined. And as noted above, both Soviet and Harvard Project findings yield a similar picture. Komsomol saturation among the young has thus deepened since the early days of the Soviet regime, with the greatest expansion among groups that were underrepresented earlier--the less educated, the blue collar workers, and women. It appears, too, to be relatively evenly distributed among the nationalities represented in the sample, with few differences in Komsomol membership among these ethnic groups. The age gap, then, is not simply a product of maturation or of changing adult roles; it reflects basic differences in the level of each generation's early mobilization. Moreover, for older generations, there is a strong connection between early mobilization in the Komsomol and political activism during the LNP.¹⁴ Few of the non-Komsomol members turned active in later life.

Figure 4 also indicates that the generation gap persists even when education, occupational status and gender are controlled. This conclusion is confirmed by the multiple regression analysis presented below. When other characteristics--basic socioeconomic status (education, income, employment), self-defined levels of personal influence and interest in politics, and fear of the authorities--are factored in, the postwar and postStalin

cohorts still prove to be the most active (see Table 2). And there is little evidence that

INSERT TABLE 2

the assumption of different adult roles through the life-cycle has any significant impact. Thus, for example, neither marriage nor having a family influences an individual's average level of activity.¹⁵ Retirement seems to be a different matter, since pensioners were less involved in compliant groups than were others still in the labor force; but both the employed and the nonemployed were still less active than younger generations.

In addition to generation, several other important sources of compliant behavior also stand out: activism is associated with an interest in politics and public affairs, a greater sense of personal influence, access to material privileges, and a job in the public sector--especially one on a local party's or ministry's nomenklatura. Given the data presented in Figure 1, we would also expect education to weigh heavily. But once other variables are included, it has little direct impact, and then only for the college-educated members of the three middle generations--purge, wartime, and post-war. Thus generation and schooling interact, as Hough (1979) and Silver (1986) contend, lowering mobilized participation for the older and less educated groups in the sample, and increasing it among the younger and more highly educated.

Not all of the college-educated are equally active, however. Table 2 reveals a split between majors in the natural and social sciences and humanities versus those who specialized in engineering, law, medicine, teaching and other applied professions. The "physicists and lyricists," to borrow Azrael's phrase, devote significantly less energy to conventional political organizations--and, as we shall see below, engage far more in behaviors the regime would like to curb.

The results also show that some of the most unrepresentative characteristics of the sample, such as ethnic identification and the decision to emigrate, have little effect on reported levels of involvement. Jewish and nonJewish respondents were engaged about equally in compliant organizations. And activism differed little between those who were simply "co-migrants," coming to the U.S. because other family members decided to leave the USSR, and those who decided themselves to emigrate. As Table 2 demonstrates, dummy variables included to capture both these sources of potential bias turn out to be non-significant. Neither ethnicity nor selectivity would seem to distort the findings on age and compliant behavior.

Compliant participation, then, appears to be rooted in a combination of job expectations, personal motivation and sense of influence, generation, and, for certain generations, education. Pressures at work lead to political activism, especially among those with responsible posts; the importance of the workplace as a key socializing device is

reaffirmed among SIP respondents. So, too, is the importance of material privileges as an incentive for compliant behavior. Yet external pressure and material rewards are not the only motives. Personal interest and perceptions of the organizations themselves also figure prominently. Thus despite the image of depoliticization that surrounds conventional mass organizations in the USSR, the active members are the most interested in politics and public affairs. And despite the image of passivity that characterizes such groups, many participants felt that members like themselves could have a degree of influence over the organization's activities. Those respondents who attended the meetings were asked if "people like you, who regularly [or sometimes] went to meetings, had influence over the adoption of the group's decisions about its activities." Their answers are surprisingly positive; in fact, for some organizations, (see Table 3) an absolute majority felt that individual members could influence the group's activities. This question does not, of course, ask

INSERT TABLE 3

whether individuals can influence "policy" or help to shape the decisions of the top leadership; surely the answers in that case would be far more negative. And not all of those who engaged in compliant organizations were equally positive: predictably, members who also participated in nonconformist activities felt much more negative about the

influence of individual members. Yet among most "compliers," the perception of even modest influence suggests that there is more behind compliant activism than either political pressure or pure career or material calculations.

Compliant behavior also hinges on age, and thus highlights the efforts to expand mass political involvement after Stalin. For earlier generations, proof of political conformity seems to have meant primarily voting. Figure 5 illustrates, for example, that the overwhelming majority of the Brezhnev, purge and wartime generations, and especially the less educated among them, rarely failed to cast their ballots in Soviet elections during their last years in the USSR--although they had been less involved in the Komsomol during their youth, and were also less politically active in later life. For the postwar and

INSERT FIGURE 5

postStalin generations, voting seems less important, while compliant activism in public organizations seems moreso--a product, apparently, of the various campaigns to revitalize mass political involvement after 1953. Membership in compliant organizations became more inclusive, and in this sense, the reforms of the post-Stalin era have succeeded in widening the net of mobilized participation. But they had very different effects on different age groups.

Unconventional Participation. Paradoxically, the most highly mobilized generations are also the most unconventional. Whatever the activity, from unsanctioned study groups to distribution of samizdat or tamizdat, from open protests and strikes to non-voting, respondents who came of age after the War and especially after Stalin are twice as likely as their elders to be involved. In contrast, the generations that experienced the purge era first-hand seem to have learned the lessons of Stalinism all too well.

However, the generation gap proves to be more subtle than a simple dichotomy between "young versus old." Once other variables are included in the model, (see Table 2) the seemingly linear decrease in unconventional behavior with age disappears, and only two age groups emerge as distinctive. One is the purge generation, which stands out as significantly less nonconformist than either older or younger respondents; the men and women who had reached their teens or early twenties at the time of the Great Purge were the most likely to avoid political risk forty years later. At the other end of the spectrum, those members of the postStalin generation with a higher education were significantly more unorthodox than any other age or educational group.

One could argue that political disaffection among the youngest generation is only to be expected--that their fathers and grandfathers were surely just as unorthodox in their day but grew more compliant as they aged. Yet the uneven age pattern suggests that this gap cannot be

attributed to the aging process itself. After adjustment for differences in education, gender, ethnic identification, income and other variables, nonconformity does not decrease proportionately from young to old. Or, to put the argument another way, there is little reason to suppose that respondents belonging to the Brezhnev or wartime generations were more unconventional in their youth than they were just before leaving the USSR.

Other evidence in the survey bears out this conclusion. Respondents were asked, for example, if they had any personal contact with the KGB while in the USSR, and if so, when and why the last contact took place. The question allows us to determine the age at which each person had his last political trouble with the KGB/NKVD before deciding to apply for emigration (excluding contacts for administrative reasons such as permission to travel or for KGB investigations of some other person). If individuals simply grow out of unconventional behavior as they mature, then their last political trouble should be at a relatively early age; and the proportion of each generation's last contacts should drop as they age (the percentages in Table 3 should therefore drop from left to right).¹⁶

INSERT TABLE 4

Yet as Table 4 reveals, the proportions increase with age among the older generations.¹⁷ In no case does any generation display a pattern of youthful or adolescent

trouble with the KGB that slowly diminished as the years passed.

Similarly, variables included to capture the effects of the life-cycle have no significant impact. Neither marriage and family responsibilities nor retirement moderate the level of unorthodox behavior. These results, coupled with the distinctiveness of the purge and postStalin generations, emphasize that a life-cycle explanation alone cannot account for the age gap in unorthodox politics. Formative experiences appear to carry greater weight.

In addition, several other critical variables emerge from Table 4 as predictors of unconventional behavior. One is gender: nonconformity is predominantly a male activity, even among men and women with the same levels of education, and of the same age. A second factor is the arrest of a close relative. Respondents with a family history of political arrests are more likely to be nonconformist themselves.¹⁸ This hints at the impact of both political socialization within the family, and of the punishment by association that affects family members after an arrest. Political disaffection gets handed down from fathers to sons.

As in the case of compliant activism, education has only a limited effect, and then only in conjunction with generation and specialty. Members of the postStalin generation who attended a university or institute emerge as significantly more unorthodox than other age groups or others with higher education. And, among the highly

educated, nonconformity is the province of the "physicists and lyricists," the natural scientists and the humanists (Azrael 1966:156; Shatz 1980: 139-56). The doctors, teachers, economists and the engineers are only half as likely to stray from officially approved political activism. As Shatz (1980) argues, the split reflects the fact that political controls--restrictions on information and travel--fall more heavily on researchers, artists and writers. It may also reflect a degree of self-selection: individuals already disposed to unconventional politics may be more likely to choose academic or creative fields. (Fendrich 1974)

The variables that prove insignificant for predicting nonconformity are also noteworthy. We would expect, for example that high job status would inhibit unorthodox activity; but Table 2 reveals that individuals with nomenklaturnye positions are neither more nor less likely to stray from compliant behavior. The effect of the workplace would seem to be asymmetric--prompting compliant activism, but not necessarily preventing nonconformity. Nor do a respondent's material privileges, either real or perceived, appear to influence political deviance.

Finally, it is important to note that the relationships in Table 2 hold even when we account for the sample's uneven ethnic makeup and for the differences between those who actively decided to emigrate and "comigrants." Unorthodox behavior is more common among non-Jewish respondents, suggesting once again that the most

common ticket out of the USSR for non-Jews was political dissent. (see Table 2) And it is significantly higher among those who decided themselves to leave the USSR. These results are important, for they emphasize the need to consider the potential biases in emigrant responses. Yet they also encourage some confidence in the findings, since the fundamental relationships between unconventional activity and age, socioeconomic status, interest, education, and gender hold among Jewish and non-Jewish respondents alike, among those who actively tried to leave and those who did not.

Thus both personal circumstances (interest in politics, arrests of family members) and political environment help to shape unconventional political behavior. Given the political environment when the purge generation came of age, few of its members were willing to challenge conventional political norms even decades after the 1930s. The contrast with the postStalin generation could not be greater, especially with the most highly educated. Unorthodox activity grows out of a combination of different formative experiences and of certain political resources, such as information and abstract reasoning skills, that come with higher education. (Connor, 1975:28)

Information and abstract reasoning, in turn, contribute to a more critical stance toward fundamental political orthodoxies about the role of the state in Soviet society. As Silver shows elsewhere in this volume, the greater the education, the less the support for the Soviet model of

state control in heavy industry, agriculture and medical care; and the less support for the dominance of society's needs over the rights of the individual. Thus the connections would seem to be straightforward: education breeds a less conformist set of political values, and these should prompt overt unconventional behavior.

Yet if we add attitudes toward state control and toward individual rights into our model of nonconformist activity, (in Table 2) the relationship turns out to be more complex.¹⁹ While some members of each generation favor greater private control of the economy, the issue prompted overt nonconformity only among the youngest--the PostStalin generation. Similarly, some members of every generation believe in greater protection of individual rights, but among them, concern for the individual turned only the postwar generation to unconventional politics.²⁰ Part of each generation rejects the old orthodoxies about the role of the state; but the old are much less disposed to tact on their objections. Moreover, the results suggest that not only behavior, but the saliency of certain values may be tied to generational cleavages, with individual rights ranking higher for those who came of age in the public ferment of deStalinization, but with economic issues receiving higher priority for the generation that began their careers in the stagnating economy of the Brezhnev era.

Interest in Politics. In addition to higher levels of compliant and unorthodox activity, the young also rank

higher as "spectators," with a greater degree of interest in politics. However, in this case, generational differences disappear once other characteristics are added into the equation. Interest is more heavily influenced by level of education, gender (women report substantially less interest), and other factors rather than by the era in which individuals came of age. Generation proves important chiefly in an individual's choice of media: while a majority of all generations listened to both Soviet and to Western radio during their LNP, the younger the individual, the more the attentiveness to Western sources and the less to Soviet ones.²¹

Interpreting the Generation Gap

The generation gap, then, embodies far more than a difference over Western music or clothes: it reflects a real divergence in the willingness to engage in overt, unorthodox political activity. And it has grown up in the face of increased mobilization among younger cohorts. In spite of ambitious efforts to mold new generations into "active builders of communism," one key target--the postStalin generation--ranks first in both mobilized participation and in unconventional politics. In fact, the younger the individual, the more likely to engage in both regime-supporting and in nonconformist activities. After all, both draw on the same basic resources of social status and education. (Abramson and Inglehart, 1984; Jennings and

Niemi, 1981) Mobilization succeeds in drawing participants into compliant organizations, but it may also work too well, creating expectations about wider citizen influence that conventional organizations alone cannot satisfy.

If mobilized participation has failed to prevent nonconformity among new generations, then other key regime strategies must also be called into question. The higher degree of political deviance suggests that the postStalin generation either has less fear of the authorities or different expectations of the the regime.

The evidence in the survey suggests both. As we would predict, the postStalin generation felt the most optimistic about the possibility of avoiding trouble with the KGB; and the college-educated among them rated their ability even higher. (see Fig. 6) Those who came of age after Stalin also felt slightly less constraint in talking with people outside the immediate family about sensitive issues such as criticizing a government official. •

INSERT FIGURE 6

At the same time, the postStalin generation found it no easier than other age groups to tell who might be a KGB agent or an informer; and they would feel more nervous in the USSR about talking with a teacher if they were treated unfairly or disagreed with something the teacher said. They reflect the political ambivalence of the post-Stalin era: partial relaxation of controls has made them somewhat more

confident about their own ability to stay out of trouble with the KGB, yet still uncertain about exactly which people and activities are "safe." (see Fig. 6)

When the question turns to the broader role of the police in contemporary Soviet society, the burnishing of the KGB's image under Andropov appears to have had its effect: the youngest generation ranks the influence of the secret police in contemporary Soviet society higher than do their fathers and grandfathers, and the young and less educated rank it even higher. They also have a distinctive view of the KGB's role in Soviet history. When asked in which era-- Stalin's, Khrushchev's or Brezhnev's-- the KGB was most influential, the majority of all ages agree on Stalin; yet a small but surprising number of respondents who came of age after Stalin choose the Brezhnev years. (see Figure 7)

They are more inclined to see their own era as

INSERT FIGURE 7

the worst, even in comparison with Stalin's time. Some members of the last generation also hold a more idealized image of Stalin himself: the less educated among the postStalin cohort give him the highest marks as a leader.

This perception gap among Soviet generations is even more pronounced on issues of material well-being and privilege. The younger the respondent, the more likely he is to condemn the Brezhnev era as the most unequal, with a privilege gap wider than Khrushchev's or even Stalin's time. More than half of the postStalin generation believes that inequality reached its peak under Brezhnev; while only

a third of respondents among the oldest generations felt the same. Moreover, the sense of material inequality is so strong that it figures prominently in predicting who will engage in political nonconformity. (see Table 2)

If different age groups have disparate perceptions, then the regime's strategy of managing expectations can only yield diminishing returns. Appeals to the past may succeed with the generations who survived the terror and the material deprivation; but for those who came of age after Stalin, the standard for judging the regime is how the system currently performs, rather than how far it's come. They are more critical than their elders, and less inclined to be satisfied with a backward look at the Soviet past to judge their own well-being. New generations seem little disposed to measure the regime against a distant past they only dimly recognize.

This conclusion bears out the findings of the Harvard Project in the 1950s. As Bauer et al. (1956) and Rossi (1957) discovered, the generations born after the Revolution had no memory of the old Russia, and reacted to the Soviet system primarily on its current performance; while the old viewed it from the perspective of the old regime. But there is one striking difference: in Stalin's time, it was the young and highly educated who responded most positively toward the Soviet system-- to government control over light industry, to welfare state programs, and to Soviet achievements in general. They felt relatively satisfied with their jobs in the USSR and less fearful than did older

cohorts, although they ranked the regime's use of terror as one of the major reasons for emigrating. Even so, a majority of respondents born after the revolution reported that they had not wanted to leave the USSR in 1940; and when they did leave, it was most likely to be because exposure to the West during the war highlighted the poverty of living standards at home. All told, they evaluated the system largely in instrumental and material terms, by what they had gained from it. And comparatively speaking, they had gained; they were the beneficiaries of Stalin's "Big Deal," with its rapid social mobility and its ambitious plans for a new social order. It tended to disappoint them chiefly when they found an external yardstick to measure the regime's material successes.

In contrast, the pre-Revolutionary generation, especially those with less education, evaluated the USSR in terms of principle and in comparison with the past. They were more convinced that nothing of the Soviet system should be kept in the event of a change in regime; they found the old system preferable to the sacrifices and the upheaval created by the new; and they were more likely to have left on grounds of opposition to or disillusionment with communism. They were more inclined to say that they had always opposed the regime. They had paid the price for the transformations of the 1920s and 1930s, and they proved to be far less positive toward Soviet leaders, institutions, and policies.²²

In contemporary Soviet society, the generation gap

revealed by the Harvard Project has been reversed. Younger respondents still evaluate the regime in terms of the present, as their counterparts did decades ago. In both cases, the focus falls on current system performance, with few backward looks at the past record. The difference is that for the youth of the purge era, "system performance" yielded more dramatic gains.

Conclusions

Our data suggest that the turbulence of Soviet history has created divergent political values, levels of activism, and evaluations of the regime among successive generations. Age cleavages extend beyond cultural tastes and preferences; they reflect different orientations to political life.

However, the generation gap is far more complex than a simple split between young and old. There is no smooth pattern, no simple progression from one generation to the next. This fact, along with the other data presented here, highlights the role that formative experiences play in shaping both behavior and perceptions. It also implies that the aging process itself does not necessarily close the gap; progression through the life-cycle does not bring a convergence among disparate age groups. The conclusions of the Harvard Project would seem to bear this out: younger generations then did not begin their adult life less supportive of the system, nor were the old necessarily more favorable toward it.

The Harvard Project results led Bauer et al. (1956) and Rossi (1957) to conclude that the young under Stalin wanted both improved living standards and a measure of political peace--and that if the regime delivered, it might increase public support among new generations. Yet a careful examination of contemporary age cleavages leads to the opposite conclusion. The decline of terror and the real improvements in living standards may appeal to the age groups with the longest memories; but for those with only "appropriated memories"--that is, with no first-hand experience--expectations would seem to have outpaced regime performance. History can work as a baseline for tempering expectations only if all see it in the same light; but our results say they do not.

If neither mobilized participation nor containment of

material aspirations has sufficed to prevent political deviance among the post-Stalin generation, what does seem to work to the regime's advantage are the countervailing perceptions that divide this last age group. The least educated prove to be slightly less negative toward the Brezhnev record on privilege and inequality, which suggests somewhat less disaffection with the regime's material performance. Even so, more than forty percent still feel that the Brezhnev era was the most unequal. But they are also twice as likely as the college-educated to see Brezhnev's KGB as more influential than either Khrushchev's or Stalin's, whether they had themselves been picked up by the police or not.²³

Judging from other results in the survey, their perceptions mirror the regime's selectivity in dealing with political deviance. Reprisals were more than twice as likely for "blue collar" deviance as for "white-collar." Thus, for example, 18.8 percent of those who led an unofficial study group, and 4.2 percent of those who simply participated in one, experienced some reprisal; so, too, did 26.7 percent of those who played a leading role in distributing samizdat/tamizdat, and 8.0 percent of those who simply transmitted it. But over half of those who led a strike, and 13.0 percent of those who participated in one were punished, as were 83.3 percent of those who led a protest 24.0 percent of the other protestors. The different perceptions among the college-educated and the less educated mirror a real difference in political cues

about when and where coercion will come into play.

Thus the generation gap is not simply one cleavage, but two, and this goes far in explaining the discrepancy between the negative evaluations of the regime's performance and the still low level of overt political deviance. Across the board, the last generation proves to be more disenchanted with the performance of the system in their own time. But those with less education, whose sheer numbers could prove the most threatening to the regime, also remain more aware of the heavy hand of the state.

NOTES

1. In all, the SIP sample included 2793 respondents, who ranged in age between 13 and 74 at the end of their "last normal period" (LNP) of life in the USSR. For purposes of analyzing political activity, I chose to focus on respondents who were at least 18 at the start of their LNP. The distinction yields an effective sample of 2667, and excludes 126 individuals between 8 and 17 at the start of their LNP.
2. The accuracy of recall can in fact be tested, since the sample included 227 pairs of respondents (454 individuals) who had lived in the same household in the USSR in the end of their LNP. A comparison of their responses (Anderson and Silver, 1986) shows substantial agreement on many key household characteristics such as square meters of housing the family shared and household expenditures. The level of agreement is only slightly lower on subjective items such as a respondent's reported degree of satisfaction with the family's housing, standard of living, or access to consumer goods.
3. Given the political sensitivity of the question of party membership for Soviet emigrants coming to the U.S., we asked respondents in the pretests whether people they knew in the U.S. would admit to membership, or if the question would disrupt the interview (e.g., respondents might break off the interview altogether or answer subsequent questions less openly.) The reactions in the pretest (and advice from

consultants to the project) all indicated that a direct question about party membership would not yield accurate information and would likely undermine the rest of the interview as well. Consequently, the questionnaire did not ask if the respondent was ever a member of the CPSU.

4. For a fuller description of the factor analysis, the variables, and the questions used to construct them, see Bahry (1986b).

5. I have purposely avoided using the terms "dissent and "dissident," because they connote active, programmatic opposition. I wanted instead to examine the distinction at the individual level between those who fit the model of a compliant citizen and those who turned to unorthodox political activity, programmatic or not. I also avoided the term "dissident" because many respondents would not so describe themselves.

One other point should also be noted about the definition of nonconformity used here. The series of items in the questionnaire that touch on unsanctioned activities also included attendance at any "unofficial art show, poetry reading or concert" during the LNP. But comments from interviewers suggested that some respondents did not pick up on the word "unofficial," and answered instead in terms of the regular cultural events they had attended. Thus it was impossible to tell how many of the responses to this question actually referred to unsanctioned activity.

6. Except for Komsomol membership, all such questions on compliant political activity refer to a respondent's LNP.

In the case of the Komsomol, the questionnaire asked if a respondent had ever belonged. I therefore counted a Komsomol member as a "compliant" only if he/she was 28 or younger during the LNP.

7. The relatively low incidence of unconventional behavior is all the more persuasive since respondents might be expected to exaggerate their anti-regime activities to impress American interviewers. If respondents offered answers they thought Americans would want to hear, the real proportion of political nonconformists could be even lower than our survey indicates. To control for this possibility, the survey included several items measuring the propensity to flatter the interviewer. Nonconformists turned out to have the lowest flattery scores--they showed the least inclination to give answers that would please American interviewers. They would therefore seem to be little disposed to overstate (or, for that matter, to understate) the extent of their unconventional political behavior.

8. For an assessment of the degree of ethnic bias on different types of questions, see Bahry (1986a).

9. Among nonconformist leaders, 48.4 percent made the decision to emigrate themselves; and among others engaged in unconventional political activities, the percentage is 45.3. In contrast, only 30.9 percent of other respondents decided themselves to leave the USSR. The correlation (gamma) between nonconformist activity and role in the emigration decision is .30.

10. The same connection between education and political

activity emerges in a Belorussian study by N. N. Beliakovich (1978).

11. Alice Rossi (1957) reports, however, that the Harvard Project results on Komsomol membership were lower in the written questionnaire (WQ), which was self-administered, than in the life-history interviews administered personally by Harvard Project researchers. Since these latter "life-history" data correspond more closely to Soviet data for the period, they are the ones cited here.

12. It is possible that exposure to the West might somehow contaminate responses and thus account for the frequency of different activities. However, most if not all respondents in the survey had arrived too recently to gain citizenship by the time of the interview, and thus were not in a position to vote. And the likelihood of respondents in the U.S. being contaminated by patterns of West German political activism are remote.

A second question might be raised about the nonequivalence of such political activities for West German versus Soviet citizens: can voting in competitive elections and non-competitive elections, or contacting of Soviet versus Western officials, be legitimately compared? If we are concerned primarily with the outcomes of elections, then the issue is a formidable one. But if we are concerned with the structure of political activity in each system, and the within-nation comparison of costs and benefits associated with different behaviors, then the data in each case reveal something similar about the nature of political involvement.

13. To test the appropriateness of these categories, I plotted residuals from the regression analysis in Table 2 against a respondent's year of birth. If the categories were inappropriate, they would yield outliers (i.e., standardized residuals with an absolute value greater than 2) clustered in certain years. However, there were few outliers, and little systematic pattern in their distribution.

14. Among those past the age of Komsomol membership during their LNP, having been an activist early on is a strong predictor of later involvement in other compliant organizations. The unstandardized regression coefficient is .415, which is significant at ($p \leq .01$)

15. Gordon and Klopov (Cited in Friedgut (1979:282)) report, though, that people at different stages of the life-cycle devote different amounts of time to compliant organizations, and that there are further differences between men and women. Given the limited data presented in their study, it is difficult to tell how much of the difference is a result of varied levels of education, type of job, or other factors that are controlled for in Table 2.

16. Some of the contacts, of course, were most likely not prompted by anything a respondent did, and we should not necessarily equate a KGB encounter with political nonconformity. Yet judging from Table 3, this does not seem to be a problem--unless we want to argue that only older respondents were contacted without cause.

17. The age pattern in Table 4 may, however, be shaped in

part by the impact of the purges, in the sense that among the older generations, those whose last contact was at an early age (during the 1930s) did not survive to be interviewed. Yet while this possibility must be borne in mind, it cannot explain the age pattern among the survivors; nor can it explain the similar age pattern among younger generations who did not experience the purges.

18. By "family history" I mean arrests prior to the first one that a respondent himself may have experienced.

19. These two measures are based on those used by Silver (1986).

20. These are results based on a regression model of nonconformity that includes measures on rights and control (see Silver 1986) and that also includes dummy variables measuring the interaction between these two attitudes and generation. Of all these variables, only two interaction terms, for postwar generation * rights and for postStalin generation * state control have any significant effect in predicting unorthodox behavior. The unstandardized regression coefficients are .017 and .028, respectively, both significant at ($p \leq .01$).

21. For example, over seventy percent of the older age groups listened daily to Soviet radio, compared to sixty-five percent of the postStalin generation. In contrast, ninety percent of the postStalin group listened to Western radio broadcasts, while only seventy percent of the purge generation, and forty percent of the Brezhnev generation did so.

22. A more elaborate comparison of the responses between SIP and the Harvard Project (HP) was not possible at this writing: some of the HP data, such as the written questionnaires, have been lost; the life-history interviews were preserved but must be recoded.

23. Fifteen percent of the members of the postStalin generation with less than a secondary education said that the KGB was most powerful in the Brezhnev era, and another fifteen percent felt there was no difference in the KGB's power under Stalin, Khrushchev or Brezhnev. Among those with higher education in this same age group, seven percent replied with "Brezhnev," and eight percent replied that there was no difference.

TABLE 1

Komsomol Membership by Generation

Age GroupStudy:

	Older generation (began work in early 1930s)	Younger generation (30 or under in 1970)
Kogan and Pavlov	51.6 %	70.9 % *
SIP		
Men	55.6	76.1
Women	30.0	79.8

Age at time of Harvard Project Interview:

Study:

	<u>Intelligentsia/ White Collar</u>		<u>Blue Collar</u>	
	<u>36-45</u>	<u>Under 35</u>	<u>36-45</u>	<u>Under 35</u>
Harvard Project (Rossi)	26 %	54 %	21 %	31 %
SIP	29.2	52.3	21.7	32.1

*Includes young workers who were party members.

Sources: Soviet Interview Project; Rossi (1957:331); Kogan and Pavlov (1976: pp. 149-50).

TABLE 2

Explaining Compliant Activism and Nonconformity:
Multiple Regression Results^a

<u>Independent Variables</u>	<u>Dependent Variables</u>	
	Compliant Activism	Nonconformity
Purge generation	.006	-.084*
Wartime generation	.002	-.028
Postwar generation	.222*	.024
PostStalin generation	.564*	.000
Purge generation * some higher education	.490*	-.007
Wartime generation * complete higher education	.297*	-.011
Postwar generation * complete higher education	.215*	.032
PostStalin generation * some higher education	.013	.184*
PostStalin generation * complete higher education	.012	.060*
Completed secondary education	.012	-.017
Some higher education	.003	-.025
Completed higher education	.014	.019
Majored in humanities, natural or social sciences	-.173*	.193*
Interest in politics	.055*	.053*
Sense of personal influence	.048*	.040
Self-ranked sense of personal privilege	.017	.019
Access to material privileges	.133*	.042
Felt privilege gap widest under Brezhnev	.034	.041*
Mixed ethnic identity (Jewish and non-Jewish)	.043	.044
Jewish non-identifier	.014	.002
Jewish spouse	-.012	.117*
Nonjewish	.038	.352*
Working	.106*	.008

TABLE 2 (continued)

<u>Independent Variables</u>	<u>Dependent Variables</u>	
	Compliant Activism	Nonconformity
Job on all-union party nomenklatura	.012	-.015
Job on republic party nomenklatura	.021	.022
Job on local party nomenklatura	.361*	-.025
Job on ministry nomenklatura	.292*	.000
Male	-.010	.078*
Prior arrest of family member	.002	.106*
Made decision to emigrate	.004	.054*
Shared in family decision to emigrate	.017	.035
Married in USSR	-.031	-.034
Had children in USSR	-.023	-.030
Household income	.013	.036
Some higher education * median income	.249*	-.016
Completed higher education * high income	.194*	.033
Felt greater ease of avoiding KGB	.016	.031
Ranked KGB influence high	.020	-.012
Felt KGB most powerful under Brezhnev	.026	-.009
R ² (adjusted)	.172	.141

a. The numbers are unstandardized regression coefficients, with those significant at ($p \leq .01$) denoted by an asterisk. Additional interaction terms measuring the joint effects of variables listed here were also included in the models, but did not prove to be significant.

DEFINITIONS OF CONSTRUCTED VARIABLES FOR TABLE 2

- Compliant activism - participation during the LNP in a housing, sanitary or repair commission, a parents' committee, druzhina, comrades' court, local party or soviet commission, a committee/commission at work, the Komsomol, or in any other public organization. It also includes holding an office in a trade union (but simple trade union membership is excluded).
- Nonconformity - participation during the LNP in an unsanctioned study or discussion group, a protest or strike, distributing samizdat/tamizdat, or participating in any other such activity as defined by the respondent.
- Generations - see definitions in text; the four generations are denoted by dummy variables; the fifth category is represented in the intercept.
- Ethnic identification - respondents were divided into five categories: 1) exclusive Jewish identifiers, who reported their nationality in the USSR as "Jewish" only; 2) mixed identifiers, who felt they belonged to at least two different nationalities, one of them Jewish; 3) nonidentifiers, whose parent(s) were Jewish but who felt they belonged to a different or to no nationality; 4) spouses, those who were not Jewish but whose spouse in LNP was; and others, chiefly Russians.
- Household income - a decile ranking, based on total household expenditures in the end of LNP.

Variables for generation, education, educational major, privilege gap under Brezhnev, ethnic identity, workforce participation, type of job, gender, prior arrest of family member, decision to emigrate, marital status, children, and KGB power under Brezhnev are all dummy variables, with the residual category counted in the intercept.

TABLE 3

Perceptions of Member Influence Over the Activities
of Compliant Organizations

% saying that members like themselves
could influence the group's activities^a

	<u>Leader</u>	<u>Attended Regularly</u>	<u>Attended Occasionally</u>
<u>Organization:</u>			
Trade union	42.7	31.0	20.6
Housing commission	64.0	64.7	50.0
Parents' commission	83.6	64.7	57.1
Local soviet or party commission	50.0	57.1	12.5
Druzhina/Comrades' Court	58.8	20.6	21.4
Commissions at workplace	66.3	54.4	43.1
Other organizations respondent attended regularly	81.1	37.0	--

a. This question was asked only of people who attended the
meetings of any of these organizations.

TABLE 4

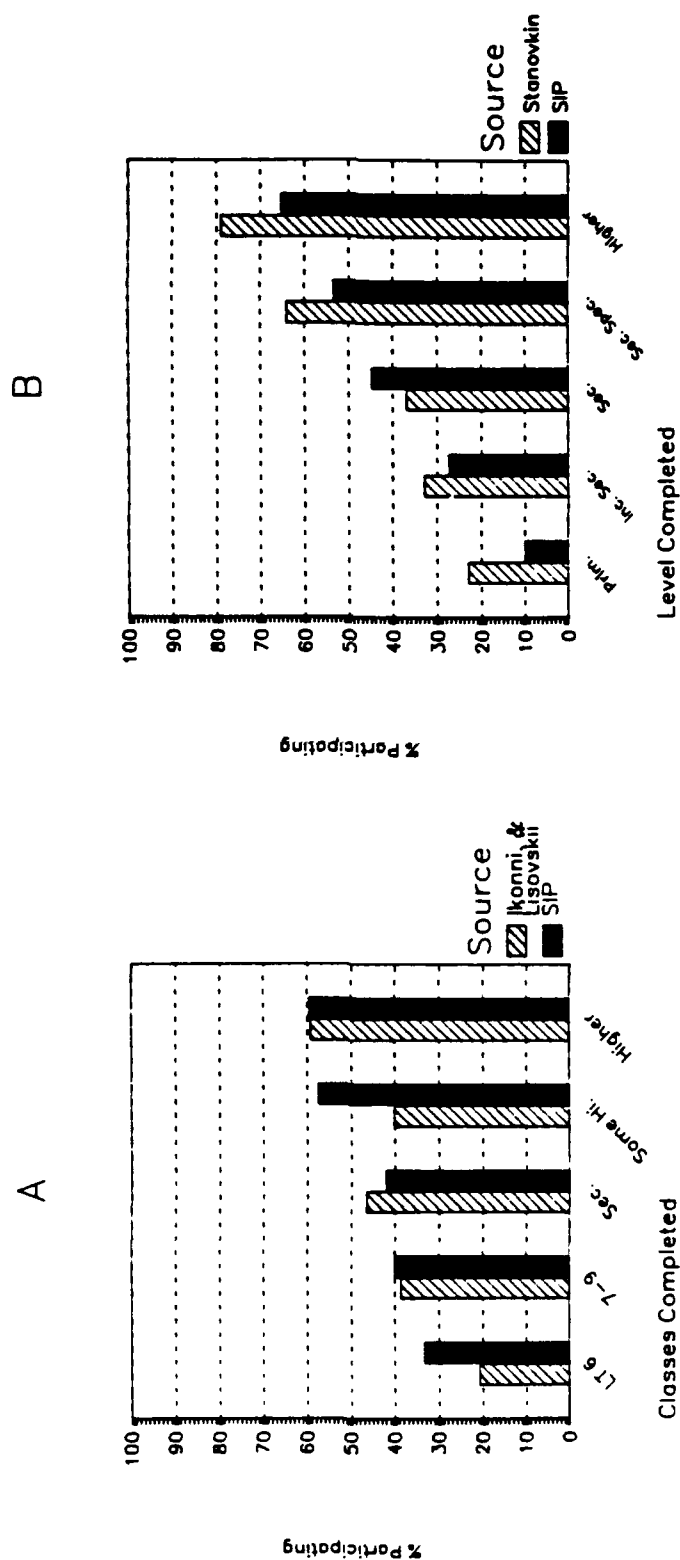
Generation and Timing of Contacts with the KGB^a

Age at Last Political Contact

	15-24 Years	25-34 Years	35-44 Years	45-54 Years	55-70 Years	N
<u>Generation:</u>						
Brezhnev	--	--	--	--	--	0
Purge	14.3 %	14.3 %	0 %	28.6 %	42.9%	7
Wartime	0	0	16.7	33.3	50.0	6
Postwar	10.3	20.5	48.7	_b	_b	39
PostStalin	37.3	58.8	_b	_b	_b	51
Total						103

-
- a. Excludes contacts related to investigations of other people or to administrative issues such as permission to travel.
- b. Respondents emigrated before reaching the upper age limit in the category.

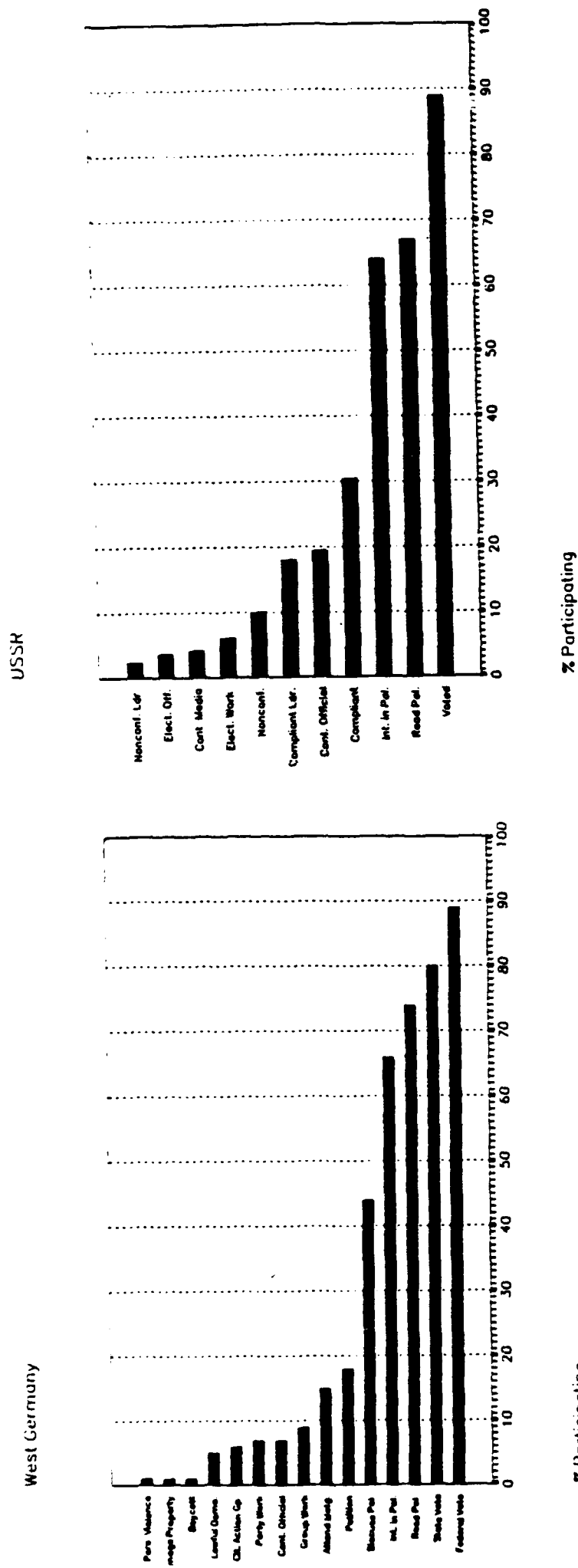
FIGURE 1
Education and Compliant Political Activism:
A Comparison of Responses Among Soviet Surveys and SIP*



* Ikonnikova and Lisovskii's data are based on a sample of respondents age 30 or under in the early 1960s. The corresponding SIP data in part A cover the same age group. Since Stanovkin's data cover multiple generations, no adjustment in SIP data was necessary.

Sources: SIP; Ikonnikova and Lisovskii 1969:64; Stanovkin 1981:73.

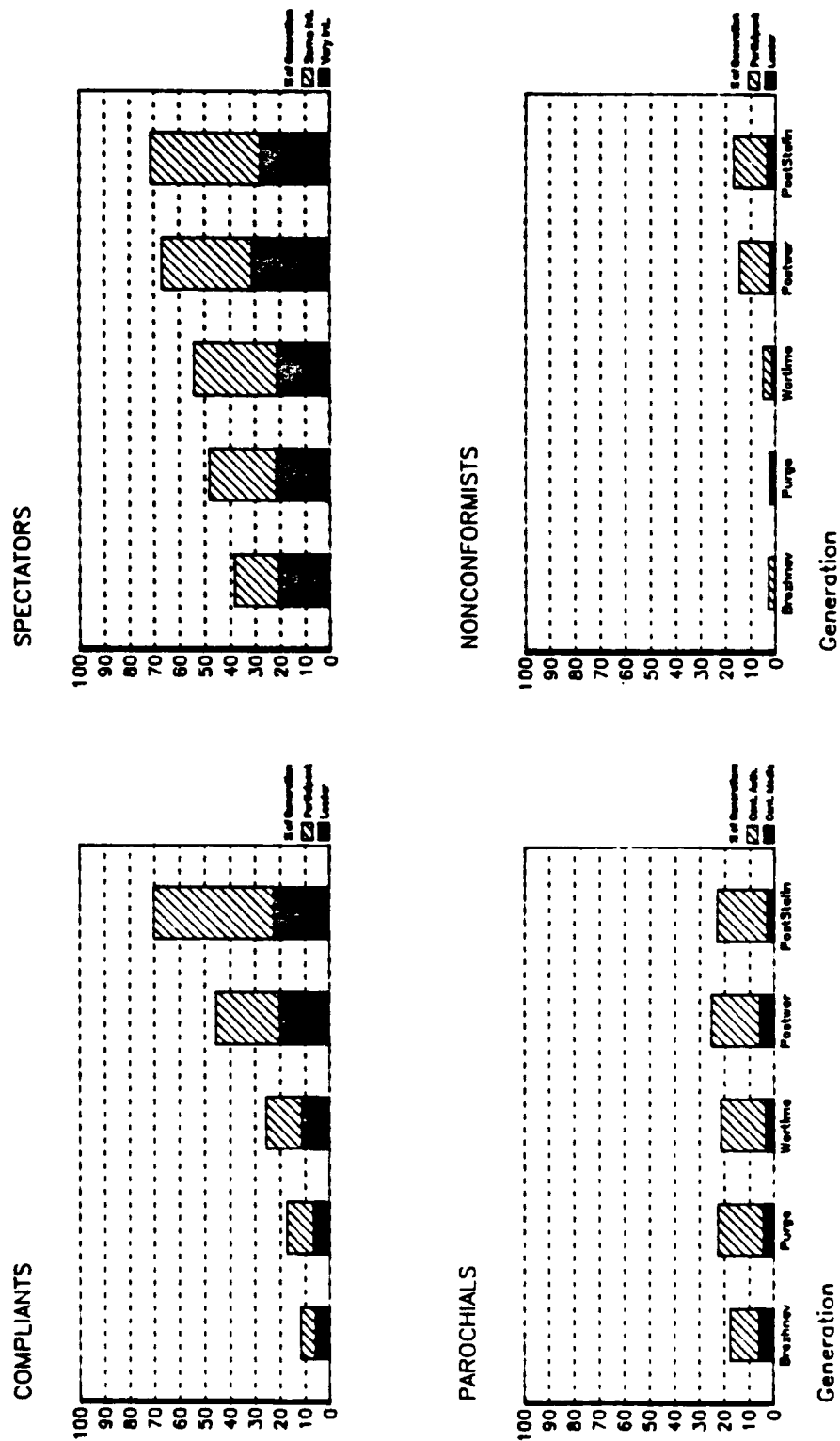
FIGURE 2
Frequency Distribution of Political Acts:
West Germany and USSR*



* West German data are from a survey conducted in 1980;
SIP data refer to a respondent's Last Normal Period of life in the USSR.

Sources: SIP; Russell Dalton 1984:272.

FIGURE 3
Generation and Political Involvement*



* For definitions of each type of involvement, see text.

FIGURE 4
Generation and Komsomol Membership

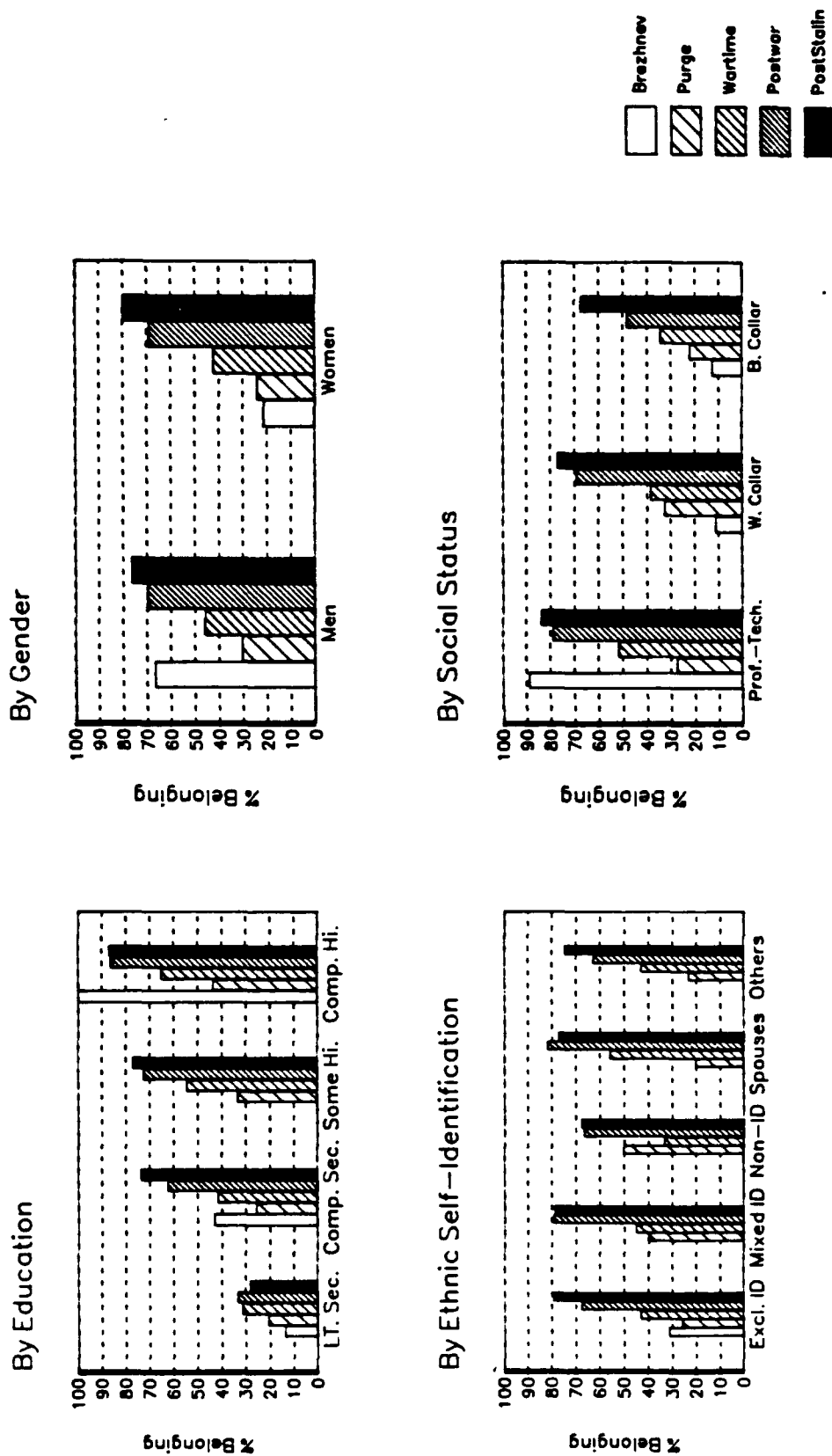


Figure 5
Generation and Voting Behavior

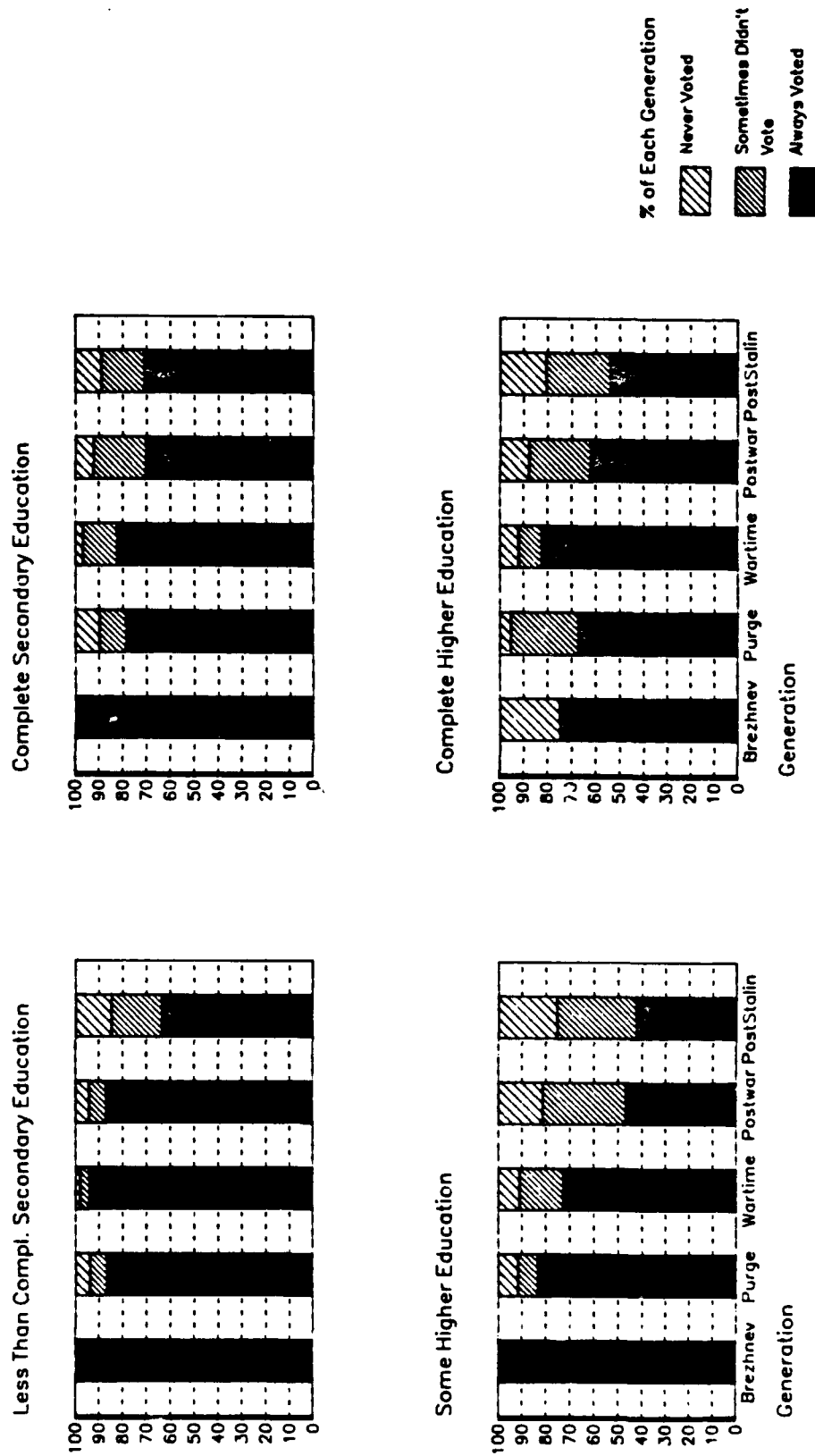


FIGURE 6
Perceptions of Political Risk by Generation and Education

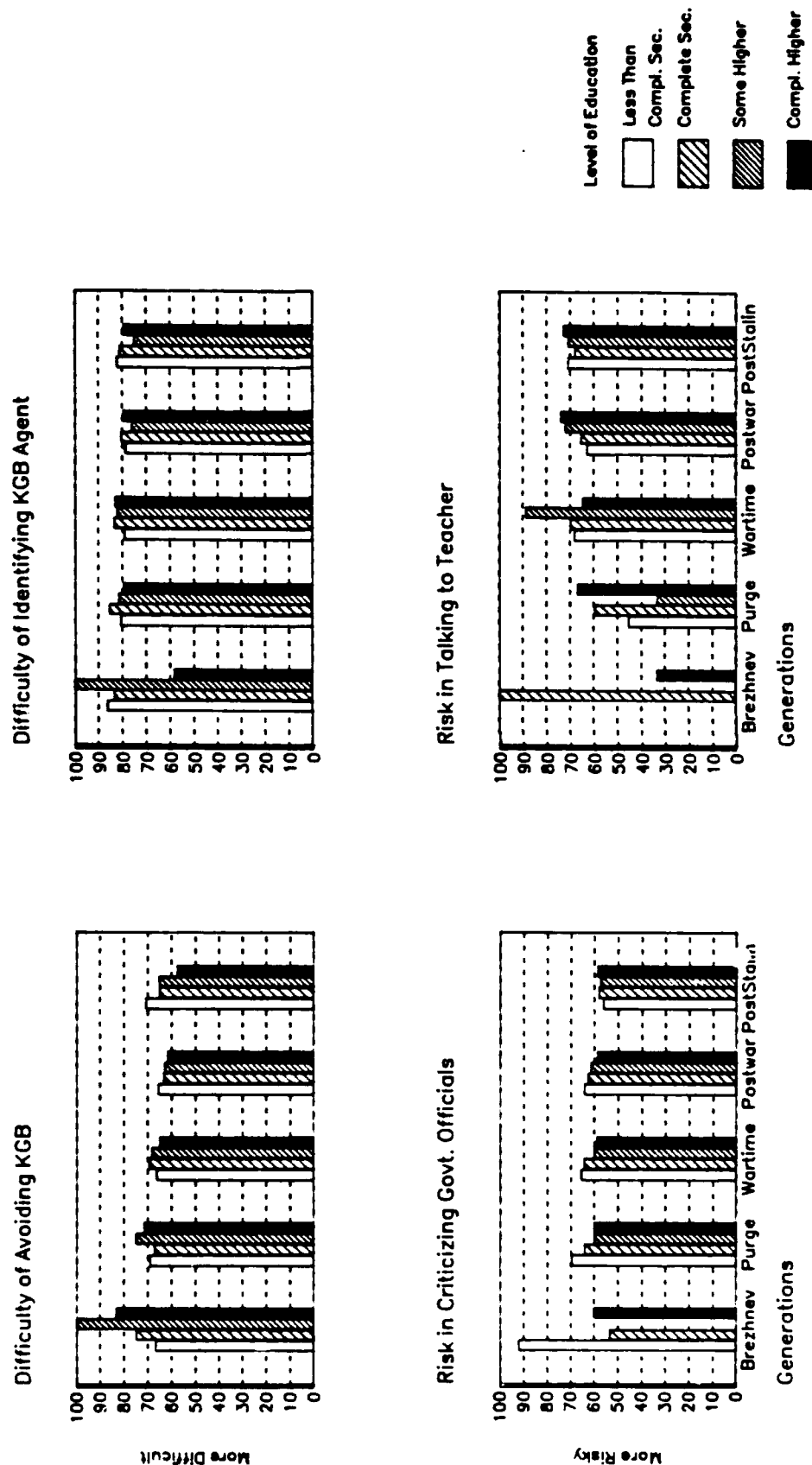


FIGURE 7

Perception of When KGB Had Most Power,

By Generation and Education

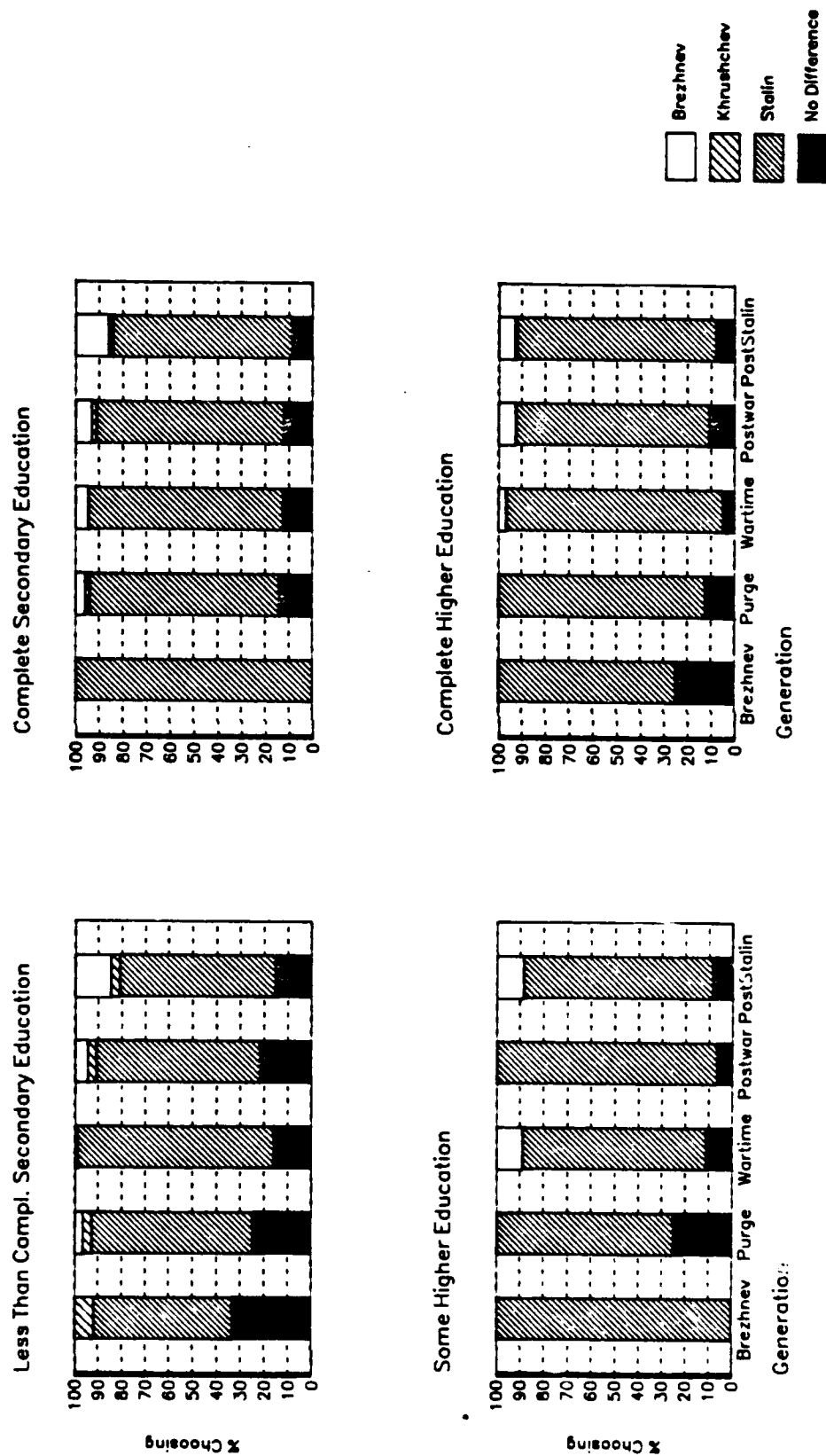
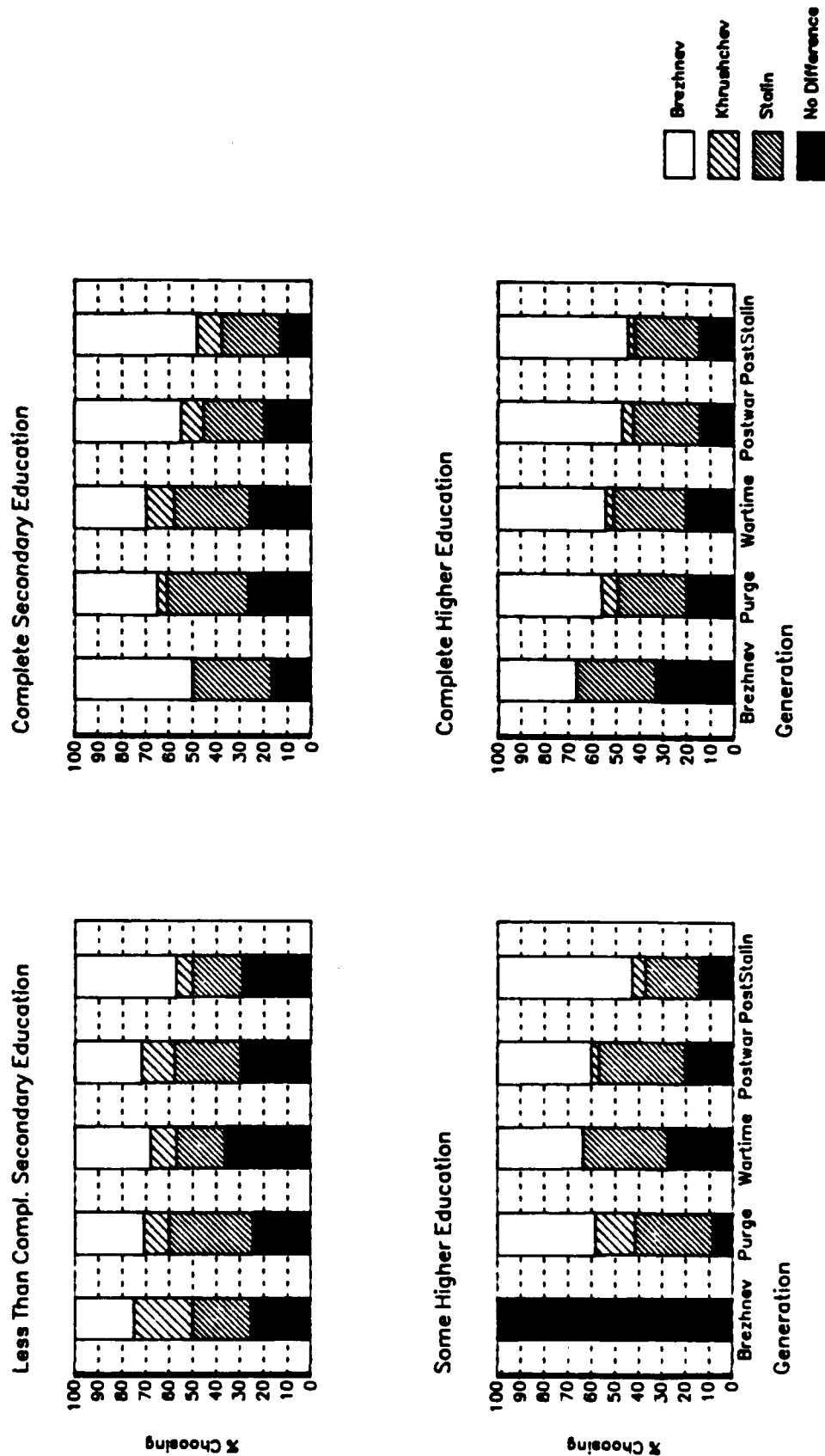


FIGURE 8
Perception of When Privilege Gap was Greatest,
By Generation and Education



BIBLIOGRAPHY

- Abramson, Paul 1974. "Generational Change in American Electoral Behavior," American Political Science Review, 68:93-105.
- Abramson, Paul and Ronald Inglehart 1984. "Generational Replacement and Value Change in Six West European Societies," Paper presented at the Annual Meeting of the American Political Science Association, Washington, D.C., 1984.
- Agnello, Thomas 1973. "Aging and The Sense of Political Powerlessness," Public Opinion Quarterly, 37:251-59.
- Anderson, Barbara and Brian Silver 1986. "The Validity of Survey Responses: Insights from Interviews of Multiple Respondents In A Household In A Survey of Soviet Emigrants," Soviet Interview Project Working Paper.
- Azrael, Jeremy 1966. Managerial Power and Soviet Politics. Cambridge: Harvard University Press.
- Bahry, Donna 1986a. "Surveying Soviet Emigrants: Political Attitudes and Ethnic Biases," mimeo.
- _____ 1986b. "Mass Politics and The Structure of Participation in The USSR: A Comparative Perspective," mimeo.
- Barnes, Samuel and Max Kaase et al. 1979. Political Action: Mass Participation in Five Western Democracies. Beverly Hills: Sage.
- Bauer, Raymond, Alex Inkeles, and Clyde Kluckhohn 1956. How the Soviet System Works. New York: Vintage Books.

- Beliakovich, N. N. 1978. Sotsial'naia aktivnost' rabocheho klassa. Minsk: Izd-vo BGU.
- Blinov, N.M. 1983. "The Sociology of Youth: Achievements and Problems," Soviet Sociology, 21:3-19. Translated from "Sotsiologiya molodezhi: dostizheniia, problemy," Sotsiologicheskie issledovaniia, 1982, no. 2:7-15.
- Boriaz, V.N. 1973. Molodezh: Metodologicheskie problemy issledovaniia. Leningrad: Nauka.
- Breslauer, George 1984. "Is There A Generation Gap in the Soviet Political Establishment? Demand Articulation by RSFSR Provincial Party First Secretaries," Soviet Studies, 36:1-2
- Brezhnev, Leonid 1981. "Otchet TsK KPSS XXVI S"ezdu," XXVI S"ezd KPSS. Stenograficheskii otchet. Moscow: Politicheskaya literatura, vol. 1.
- Brzezinski, Zbigniew and Samuel Huntington 1965. Political Power: USA/USSR. New York: Vintage Books.
- Bushnell, John 1979. "The New Soviet Man Turns Pessimist," Survey, 24:1-18.
- Callaghan, Tim 1960. "Studying the Students: Between Conformity and Dissent," Survey, no. 33:12-19.
- Connor, Walter 1973. "Dissent in a Complex Society," Problems of Communism 22:40-52.
- _____ 1975. "Generations and Politics in the USSR," Problems of Communism, 24:20-31.
- Converse, Philip 1976. The Dynamics of Party Support: Cohort- Analyzing Party Identification. Beverly

Hills: Sage.

Cutler, Neal 1969-70. "Generation, Maturation and Party Affiliation: A Cohort Analysis," Public Opinion Quarterly, 33:583-88.

Dalton, Russell J. 1977. "Was There A Revolution? A Note on Generational Versus Life Cycle Explanations of Value Differences," Comparative Political Studies, 9:459-73.

(1984) "Politics in West Germany," in Gabriel Almond and G. Bingham Powell, eds., Comparative Politics Today: A Worldview. Boston: Little, Brown.

DiFranceisco, Wayne and Zvi Gitelman 1984. "Soviet Political Culture and 'Covert Participation' in Policy Implementation," American Political Science Review 78:603-21.

Efimov, V. I. 1977. "Obrazovanie i sotsial'no-professional'noe prodvizhenie molodikh rabochikh," Sotsiologicheskie Issledovaniia, no. 1:47-51.

Fainsod, Merle 1964. How Russia Is Ruled. Cambridge: Harvard University Press.

Fendrich, James 1974. "Activists Ten Years Later: A Test of Generational Unit Continuity," Journal of Social Issues, 30:95-118.

Flanagan, Scott C. 1982. "Changing Values in Advanced Industrial Societies: Inglehart's Silent Revolution from the Perspective of Japanese Findings," Comparative Political Studies. 14:403-

44.

Foner, Anne 1974. "Age Stratification and Age Conflict in Political Life," American Sociological Review, 39:187-96.

Friedgut, Theodore 1979. Political Participation in the USSR. Princeton: Princeton University Press.

Glenn, Norval D. and Michael Grimes 1968. "Aging, Voting, and Political Interest," American Sociological Review, 33:563-75.

Glenn, Norval and Ted Hefner 1972. "Further Evidence on Aging and Party Identification," Public Opinion Quarterly, 35:31-47.

Gorshkov, M. K. and F. E. Sheregi 1979. "Dinamika obshchestvennogo mneniia molodezhi," Sotsiologicheskie Issledovaniia, no. 4:33-40.

Harris, Jonathan 1971. "The Dilemma of Dissidence," Survey, :107-22.

Huntington, Samuel and Joan Nelson 1976. No Easy Choice: Political Participation in Developing Countries. Cambridge: Harvard University Press.

Iaroshenko, T. M. 1977. "Vozrast v sotsiologicheskom issledovanii," Sotsiologicheskie Issledovaniia, no. 1:133-39.

Ikonnikova, S. N. and V. T. Lysovskii 1969. Molodezh: o sebe, o svoikh sverstvakh. Leningrad: Lenizdat.

Inglehart, Ronald 1971. "The Silent Revolution in Europe: Intergenerational Change in Post-Industrial Societies," American Political Science Review,

65:991-1017.

_____. 1985. "Aggregate Stability and Individual-Level Flux in Mass Belief Systems: The Level of Analysis Paradox," American Political Science Review 79:97-117.

Inkeles, Alex and Raymond Bauer 1961. The Soviet Citizen: Daily Life in a Totalitarian Society. Cambridge: Harvard University Press.

Jacobs, Everett 1976. "A Note on Membership of the Soviet Communist Party," Soviet Jewish Affairs 6:114-15.

_____. 1978. "Further Considerations on Jewish Representation in Local Soviets and in the CPSU," Soviet Jewish Affairs, 8:26-3.

_____. 1980. "A Note on Jewish Membership of the Belorussian Communist Party," Soviet Jewish Affairs, 10:51-57.

Jennings, M. Kent 1976. "The Variable Nature of Generational Conflict," Comparative Political Studies, 9:171-88.

Jennings, M. Kent and Richard Niemi, 1981. Generations and Politics: A Panel Study of Young Adults and Their Parents. Princeton: Princeton University Press.

Jennings, M. Kent and Gregory Markus 1984 "Partisan Orientations Over the Long Haul: Results from the Three-Wave Political Socialization Panel Study," American Political Science Review, 78:1000-18.

Juviler, Peter 1961. "Communist Morality and Soviet Youth," Problems of Communism, no. 3:16-24.

Kassof, Allen 1965. The Soviet Youth Program. Cambridge:

Harvard University Press.

- Khudushin, F. S. 1977. "Marksizm-Leninizm i problema preemstvennosti pokoleniia," Sotsiologicheskie Issledovaniia, no. 3:35-41.
- Klecka, William 1971. "Applying Political Generations to the Study of Political Behavior: A Cohort Analysis," Public Opinion Quarterly, 34:358-373.
- Kogan, L. N. and B. S. Pavlov 1976. Molodoi rabochi: Vchera, segodnia. Sverdlovsk: Sredne-Ural'skoe knizhnoe izdatel'stvo.
- Kon, I. S. "Vozrastnye kategorii v naukakh o cheloveke i obshchestve," Sotsiologicheskie Issledovaniia, no. 3:76-86.
- Mannheim, Karl 1972. "The Problem of Generations," in Philip Altbach and Robert Lanfer, eds., The New Pilgrims: Youth Protest in Transition. New York: David McKay, pp. 101-36.
- Markus, Gregory 1983. "Dynamic Modeling of Cohort Change: The Case of Political Partisanship," Political Methodology, 27:717-48.
- Marsh, Alan 1977. Protest and Political Consciousness. Beverly Hills: sage.
- Molodezh: Ee interesy, stremleniia, idealy. 1969. Moscow: Molodaia gvardiia.
- Moshniaga, V. P. 1978. "Molodezhnye organizatsii i sovremennoe sotsial'noe razvitie," Sotsiologicheskie Issledovaniia, no. 4:64-72.
- Nie, Norman, Sidney Verba and Jae-on Kim 1974. " Political

Participation and the Life Cycle," Comparative Politics, vol. 6:319-40.

Reddaway, Peter 1983. "Dissent in the Soviet Union," Problems of Communism, no. 6.

Rossi, Alice 1957. "Generational Differences in the Soviet Union," Ph. D. Dissertation, Columbia University, mimeo.

Shatz, Marshall 1980. Soviet Dissent in Historical Perspective. New York, Cambridge University Press.

Silver, Brian 1986. "Political Beliefs of the Soviet Citizens: Sources of Support for Regime Norms," Soviet Interview Project Working Paper.

Smirnov, V. A. 1978. "Problema formirovaniia u rabochei molodezhi soznatel'nogo otnosheniia k trudu," Sotsiologicheskie Issledovaniia, no. 4:80-86.

Sokolov, V. M. 1976. "Formirovanie kommunisticheskogo mirovozzreniia molodezhi," Sotsiologicheskie Issledovaniia no. 2:29-37.

Speranskii, V. I. 1975. "Eksperimental'naia proverka pokazatelei effektivnosti raboty komsomol'skikh organizatsii," Sotsiologicheskie Issledovaniia, no. 2:110-17.

Stanovkin, S. K. 1981. "Obshchestvenno-politicheskaia aktivnost' trudiashchikhsia i nekotorye faktory ee razvitiia," Problemy nauchnogo kommunizma, vol. 15.

Tolz, Vladimir 1984. "The Party and Youth: Old Remedies and New Problems," Radio Liberty Research, no.

335/84.

Verba, Sidney and Norman Nie 1972. Participation in America: Political Democracy and Social Equality. New York: Harper and Row.

Verba, Sidney, Norman Nie and Jae-on Kim 1978. Participation and Political Equality: A Seven-Nation Comparison. Cambridge: Cambridge University Press.

Vershlovskaya. S. G. and L. N. Lesokhina 1975. "Rabochaia molodezh i obrazovanie," Sotsiologicheskie Issledovaniia, no. 2:90-99.

Volkov, Iu. E. 1972. "Razvitie obshchestvennoi aktivnosti molodezhi i sotsial'nyi progress," in Ekonomicheskie i sotsial'no-politicheskie problemy kommunisticheskogo stroitel'stva. Moscow, Mysl' pp. 332-49.

Welch, Susan 1975. "Dimensions of Political Participation in a Canadian Sample," Canadian Journal of Political Science :553-59.

Zhitenev, V. A. 1978. "Issledovanie problem molodezhi: sostoianie i zadachi," Sotsiologicheskie Issledovaniia, no. 2:12-20.

Zuckerman, Alan S. and Darrell M. West 1985. "The Political Bases of Citizen Contacting: A Cross-National Analysis," American Political Science Review, 79:117-32.

Chapter Four

Political Beliefs of the Soviet Citizen:
Sources of Support for Regime Norms

Brian D. Silver

*POLITICAL BELIEFS OF THE SOVIET CITIZEN:
SOURCES OF SUPPORT FOR REGIME NORMS**

Students of Soviet affairs have long been concerned with how the Soviet political elite generates popular support. The conventional view of the Soviet system before the death of Stalin is summed up in a chapter in Merle Fainsod's How Russia Is Ruled entitled: "Terror as a System of Power." That chapter's first sentence is, "Terror is the linchpin of modern totalitarianism" (Fainsod 1961: 354). Seweryn Bialer's later formulation, describing the Stalinist period, is similar: "[T]error functioned principally not as a tool of social change, but as a normal method of rule and governance (Bialer 1980: 12).

If it is true that "totalitarian dictatorship may be regarded as a substitute for other forms of coordination with a stronger groundwork in popular consensus" (Moore 1954), then the critical question is: What has been the method of achieving consensus, or support, for the established political order in the Soviet Union, once terror was no longer the main instrument of control? It is worth recalling Vera Dunham's observation that "In Stalin's time -- and even in Stalin's worst times -- the regime was supported by more than simple terror, a truism still overlooked from time to time" (Dunham 1979: 13). But the balance of methods of generating mass support is said to have shifted in the post-Stalin era (by Dunham's account, in the late-Stalin era).

Two main methods of generating mass support for the Soviet system in the post-Stalin era have been emphasized in the scholarly literature: a) agitation, propaganda, or, more generally, education; and b) the manipulation of material rewards. Each should be regarded as a possible means of generating political support, the efficacy of which must be determined empirically.

Education. One method by which the government is said to generate political support is the invocation of patriotic feelings and the indoctrination of a

common world-view through both formal education and the day-to-day manipulation of information through the mass media.

The conventional interpretation of the efficacy of the methods used by Soviet leaders to control political thought and action was expressed many years ago by Fainsod:

The power of the regime to bombard the minds of the young is perhaps its most formidable weapon. While loyalties may erode with experience and maturity, each new generation offers the ruling group a fresh opportunity to rebuild its mass support and to renew its life energies (Fainsod 1961: 494).

Jeremy Azrael has described the goals of the Soviet school curriculum as follows:

The ultimate goal of the educational system has been to render terror superfluous by establishing a totalitarian consensus in society and creating a "new man" characterized by the sort of self-control and self-mobilization that would permit the establishment of a wholly "consensual" or "popular" totalitarianism (Azrael 1965: 267).

The implicit hypothesis is, then, that people's level of educational attainment is positively related to their support for the regime.

Three processes could produce the hypothesized relationship. The first is an "exposure effect." People with higher levels of formal educational attainment have had much more extended exposure to formal instruction and indoctrination in the officially prescribed outlook. Organized extracurricular activities in the schools are also designed to reinforce an appropriate outlook.

The second is a "selection effect." Educational institutions tend to select those who are more committed to working within the system, so that at each stage in the educational process, the survivors are more likely to be the conformists.

Third is a "credentials effect." Educational credentials are often critical requirements for access to the most remunerative jobs. Those who succeed in the system are therefore likely to look favorably on that system and its operating norms. This kind of process seems to be responsible for the fact that in the

United States, the higher one's education, the more likely one is to support such regime norms as individual political efficacy and tolerance toward minorities (Wright 1976; Abramson 1983: ch. 10; Jackman and Muha 1984).

But one could argue on the contrary that advanced education is likely to be intellectually liberating and to induce a more critical stance towards official dogma, even when, as in the Soviet Union, the curriculum is designed primarily to train specialists in technical fields (Dobson 1980). If education works in this way, then it is likely to weaken rather than strengthen the acceptance of established ways of doing things. Moreover, since the more educated in the Soviet Union are attentive to a wider variety of mass media and other sources of information, including foreign sources (Mickiewicz 1981: ch. 9), they are likely to be more aware of alternatives to established practices.

Thus, under some models of behavior we have reason to expect education to be positively related to support for the regime, but under other models we have reason to expect education to be negatively related to support for the regime.

Material Incentives. The second major factor that is said to affect popular support for the Soviet regime is the distribution of material incentives. But does change in the material welfare of society as a whole generate a payoff in the form of popular support for the government?

What Vera Dunham describes as the "Big Deal" assumes such a payoff. In the period of post-World War II reconstruction, the Big Deal offered to the middle class the promise of a comfortable material life and a modicum of freedom in the conduct of their private lives in exchange for hard work and support for the established political order.

Similarly, what George Breslauer has called the "social contract" of "welfare-state authoritarianism," which he says originated when Brezhnev came into office in 1964, also involved an exchange -- granting "a considerable

measure of physical security and privatism for the politically conformist" (Breslauer 1978: 4).

It has been common for analysts to evaluate the prospects for political stability and for reform in the USSR in terms of the strength of popular support for the political system generated by the satisfaction of material wants. Bialer argues:

"... [T]o gauge the regime's stability, the only legitimate vantage point is that of Soviet citizens themselves. And here the crucial sphere is the domestic economy, and the point of reference for judging performance is the comparison with the immediate Soviet past. By this standard the regime's performance in the Brezhnev era can be judged a success (Bialer 1980: 149).

John Bushnell (1980) also claims that the increasing supply of consumer goods in the late 1950s and the 1960s generated substantial support for the regime, particularly within the middle class. He claims that the current perception of shortages of goods has weakened that support.

More recently, Timothy Colton has argued that [the Soviet regime's] solidity rests also on a record of positive achievements.... Cradle-to-grave social services and safeguards ... give Soviet citizens a security few would happily surrender.... All told, the regime's accomplishments represent a store of political capital on which it can draw for some time (Colton 1984: 27).

All of these studies rest on the strong assumption that citizens' material satisfaction leads to support for the political system. But how valid is that assumption? How large is the "store of political capital" that has been generated by cradle-to-grave social services? Does the ever-increasing educational level of the population raise expectations for the provision of goods and services more rapidly than they can be met?¹ Is there a viable strategy by which the leaders of the Communist Party can maintain political support -- the store of political capital needed to undertake major reform of economic institutions --

by appeasing the population's demand for material goods? The answer to the last question is, "Yes," but the strategy would need to be complex.

Emigrants as Sources of Information on Political Beliefs

The answers to all of these questions require information about the states of mind of the Soviet population. Most scholars who have referred to the critical importance of subjective popular evaluations for the stability of the Soviet political system have not studied those evaluations empirically.

Few studies, however, even those based on Soviet emigrants, have generated evidence about what Soviet citizens think about politics.² Most have focused on political behavior. Even studies based on Soviet public opinion polls have little to say about political attitudes.³ In contrast, the SIP General Survey probed into many aspects of both the life experience and subjective perceptions and evaluations of recent emigrants from the Soviet Union.

That the respondents to the SIP General Survey are mostly highly educated Jews from big cities, and that they are emigrants, might prompt the premature conclusion that little can be learned about Soviet political attitudes and behavior from these people. Thus, in addition to the normal concerns about the validity of survey responses, two concerns are special to this study.

The first can be termed "emigrant bias." This involves several components: a) the social and economic backgrounds of the emigrants differ substantially from those of the Soviet population as a whole; b) the political experiences of the emigrants in the Soviet Union may not be representative even of people from otherwise similar backgrounds who did not emigrate from the USSR; and c) the very experience of emigration and of living outside the USSR may have traumatized or in other ways affected the respondents' memories and evaluations of life in the USSR.

The second threat to validity can be termed "ethnic bias." Various aspects of the ethnic and religious orientation and experience of the respondents might

make their outlook peculiar even if they were perfectly matched with the Soviet population with respect to socioeconomic background.

Detailed discussion of the methods of testing and adjusting for possible bias is beyond the range of this chapter.⁴ But it is important to discuss briefly methods of dealing with potential bias that are especially relevant to the study of political beliefs.

First, the results of the SIP General Survey were not intended to be generalized to the Soviet population as a whole. At most, the results can be generalized to what has been termed a "Soviet referent population" of European-background residents of large and medium-sized cities.⁵ Hence, I avoid representing the overall frequency distributions and averages from the respondents as those of the Soviet population and instead focus on the relationships among variables. Although the strength of the relations between variables in the emigrant survey cannot be assumed to match those in the Soviet population, the basic direction of the statistical relationships is likely to be similar.⁶

Second, at some points in the analysis, I take information about the respondents' emigration experience and ethnic background directly into account -- that is, I test whether these factors make any difference in the analytic results.

Third, evidence from the survey results can be marshalled to show that the respondents as a whole do not fit any stereotype of the refugees as embittered expatriates who are unable to say positive things about the country they have left or who are trying to report only what they think the interviewers would like to hear.⁷ It is helpful to review some evidence concerning this issue.

Satisfaction with Life in the USSR. The first type of evidence deals with the respondents' reported satisfaction with the material aspects of their lives in the USSR. When asked how satisfied they had been with various aspects of life during their "last normal period of life"⁸ in the USSR, over two-thirds of the respondents said that they were somewhat satisfied or very satisfied with their

standard of living, their job, their housing, and public medical care. Only in response to a question on the availability of goods was less than a majority either somewhat satisfied or very satisfied: less than one-fourth said they were somewhat satisfied or were very satisfied with the availability of goods.⁹

Moreover, on three of these dimensions the respondents reported that the situation had improved during their last five years of normal life in the USSR; only in their assessment of public medical care and the availability of goods did a majority of respondents report a deterioration of the situation.

This response pattern does not mean that there is no response bias on the aggregate or individual level, but it is strong counter-evidence for the common assumption that the very fact that the respondents left the Soviet Union indicates their total rejection of it.¹⁰

Emigration as Family Decision. Although there is no question that uprooting a family and permanently moving to a foreign country is a dramatic and difficult event for most people, the impact of the move on most of the respondents is probably ameliorated by the fact that few respondents migrated alone, and the vast majority felt that they played at least some role in the decision to emigrate.

Motivations for Emigration. Another kind of evidence is people's motivations for emigration. The respondents were asked the question, "What were your reasons for leaving the Soviet Union?" The responses were coded into more than 80 categories, which I have reduced to four broad headings: political, economic, religious-ethnic, and family-friends.¹¹ There are many ways to look at this kind of evidence. Given the common image of the emigrants as seekers of religious and political freedom, it is important to determine whether religious and political motivations actually do predominate among SIP respondents.

Table 1 shows the percentage of respondents who stated a motive for emigration that falls into one of the four broad categories, crosstabulated by a number of respondent background characteristics.¹² The cell entries are the percentage

of respondents with the given background characteristic who reported the given motivation. For example, 49.5% of the men reported a religious or ethnic reason for emigrating. The percentages add to more than 100 across the rows because most respondents gave more than one answer, and a respondent's different answers could fall into different categories.

[PLACE TABLE 1 ABOUT HERE]

As shown in the top row of numbers in Table 1, religious-ethnic, family-friends, and political reasons are mentioned with almost equal frequency as a motivation for emigration. Not surprisingly, those who were Jewish in self-identification ("Religious Jew" and "Non-Religious Jew" in the table) were more likely to name a religious or ethnic motivation. And those who had "No Jewish Connection" were very unlikely to mention a religious or ethnic motivation for emigrating.

Family reasons were most commonly stated by those who were passive migrants, who "played no significant role" in the decision to emigrate. Women and older people were also likely to state family reasons for leaving the USSR.

The respondent characteristic that is related most strongly to whether the respondent mentioned economic reasons is age (year of birth). The higher saliency of economic reasons to younger respondents is not surprising, since it is they whose lifetime career paths are potentially most affected by emigration.

Political motivations are much more common among younger emigrants than among older emigrants, among men than among women, and among those with "No Jewish Connection" or whose only Jewish connection was through the family, than among self-identified Jews.

The relationship between ethnicity and whether respondents mentioned political motivations reflects the fact that about a third of the non-Jews in the sample came as political refugees who were not part of the Jewish emigration, and almost 90% of those with "No Jewish Connection" are political refugees.

Over 80% of the respondents, however, are either religious Jews or non-religious Jews. For neither of the latter two groups was politics the most frequently cited motivation for emigration.

To summarize the evidence on the bias issue, most of the respondents to the SIP General Survey were not dissatisfied with all aspects of life in the USSR, nor were they motivated to emigrate primarily for political reasons. On the contrary, the respondents on net claim to have been satisfied with many major aspects of life in the USSR and to have had a great variety of motives for leaving it.

Patterns of Support for Regime Norms

I turn now to the main subject of this analysis: patterns of popular support for regime norms. The proper balance between social planning and control on the one hand, and the workings of private markets, private decisions, and private interests on the other hand, is at the heart of most discussions of political reform in the USSR. Thus, it is reasonable to characterize the Soviet political system and many public policy alternatives in terms of the balance between public and private control or choice.¹³

Accordingly, I examine the patterns of popular support for several key organizing principles of the Soviet political order that reflect the balance between public and private control. I refer to these principles as "regime norms."¹⁴ Six survey questions were designed to measure the extent of support for fundamental norms of the Soviet regime: state ownership of heavy industry, state control of agricultural production and distribution, state provision of free medical care for all citizens, denial of the right to strike, the requirement that citizens have residence permits to live in large cities, and protection of the rights of society over the rights of persons accused of crimes. The wording of the questions is given in the Technical Appendix.

Each question gave the respondent a choice between an argument and a counter-argument. For example: "Some people in the Soviet Union say that the state should own all heavy industry. Others say that all heavy industry should be owned privately. Where would you have placed yourself on this issue in [the end of your last normal period of life in the USSR]?"

For each question, respondents were asked to locate their own position on a 7-point scale. At one end of each scale was the most extreme "state" or "collective" position (e.g., "State should own all heavy industry," "Workers should not be able to strike"). At the opposite end was the most extreme "private" or "individual rights" position ("Heavy Industry should be owned privately," "All workers should have a right to strike"). Thus, answers could range between 7 (State-Collective) and 1 (Private-Individual), with 4 representing the midpoint.

We did not try to make the arguments and counter-arguments equally attractive on each question. Such a goal would have been unrealistic for some of the questions. Instead, the counter-arguments were designed primarily to increase the variance in responses on each issue. Balance was sought by asking about a range of issues.

I equate the "state-collective" end of each scale with the regime norm or established institutional practice on that issue. The higher the score, the greater the respondent's support for the regime norm; the lower the score, the greater the respondent's preference for a more private or individualistic norm. Thus, I assume that people's preference for state or collective control indicates support for the established political order.

These institutionalized practices are indicators of a form of government that has variously been termed a "totalitarian dictatorship," an "organizational society" (Rigby 1964), or an "administered society" that constitutes a form of "totalitarianism without terror" (Kassof 1964). As de facto norms, these practices are not necessarily endorsed in the Constitution of the USSR or the Commun-

ist Party Program. But they have been readily identifiable as aspects of the established political order for at least the last 60 years. They are part of a basic commitment to plan, to organize, and to mobilize the population to serve collective rather than private or individual interests.

A factor analysis of the six measures of support for regime norms was performed to determine whether the questions tapped into one or more underlying attitudinal dimensions. This analysis revealed two distinct dimensions.¹⁵ The first includes the items on state ownership of industry, state control of agriculture, and state provision of free medical care. I call this the State-Private Control dimension. The second includes the items on the rights of the accused, the right to strike, and the requirement of residence permits. I call this the Collective-Individual Rights dimension.

The distributions of responses to the six questions are shown in Table 2 and Figure 1. In Table 2, within each dimension the items are listed in descending order of the percentage of respondents who chose the most extreme pro-state position, code 7. This is identical to the ascending order of support for the most extreme anti-state position, code 1, as well as to the ascending order of the mean scores for the items. The same pattern is observed among all six items, as shown in Figure 1. This consistency of the orderings suggests that relying on the means will not misrepresent the response patterns.

[PLACE TABLE 2 AND FIGURE 1 ABOUT HERE]

State vs. Private Control

Strongest support for established practice is given to the provision of free public medical care. Fifty-two percent of all respondents state the strongest possible concurrence with the statement that "the state should provide free medical care for all citizens." We also asked the following question:

Think for a moment about the Soviet system with its good and bad points. Suppose you could create a system of government in the Soviet Union that is different from the one which currently exists. What things in the present Soviet system would you want to keep in the new one?

Twenty-four percent of all responses mentioned that the system of health care should be kept. This was the second most frequent response after education, which comprised 28% of all responses.¹⁶ Mention of the system of health care placed well ahead of the third most common response, "Keep nothing" (11% of the responses), and the fourth most common response, crime control (7%). In response to a similar question, the emigre respondents to the Harvard Project study in the early 1950s also named education and medical care as the leading two features of the Soviet system that should be kept if the government were to change (Inkeles and Bauer 1968: 236).¹⁷

Of the six regime-norm questions, the institutional practice that garners the second strongest support is that "the state should own all heavy industry." Thirty-eight percent of the respondents gave the strongest possible endorsement of this practice, while 20% preferred the opposite extreme: "that all heavy industry should be owned privately." The strong support for state ownership of heavy industry is also consistent with the findings in the Harvard Project study (Inkeles and Bauer 1968: 243).

The endorsement of state control does not extend to agriculture. Fifty-nine percent of the respondents give the strongest possible endorsement to the position that "all agricultural production and distribution should be private." Although respondents who are positively disposed toward state ownership of heavy industry are more likely than other respondents to prefer state control of agriculture, the support for state control of heavy industry is far greater than the support for state control of agriculture. This relative ranking of support for state control of industry and agriculture also closely parallels the findings of the Harvard Project (Inkeles and Bauer 1968: 244-245).

It is reassuring about the validity of our survey results that the respondents are willing to give strong endorsements to certain key features of the Soviet regime while sharply criticizing other Soviet institutions. The consistency between these results and those of the Harvard Project further supports the conclusion that the respondents on the whole are giving answers that reflect their actual opinions. This consistency is especially important for two reasons. First, the respondents in the Harvard Project interviews had very different backgrounds from those in the Soviet Interview Project. Whereas more than 90% of the SIP respondents are Jews or are married to a Jew (see Table 1), the respondents to the Harvard Project were almost all Russians or Ukrainians. Second, the respondents to the Harvard Project were mostly refugees and displaced persons who last lived in the USSR in the 1930s and 1940s. The consistency in responses in the two surveys testifies both to the continuity of the socialization to regime norms over time and to the robustness of the results.

Collective vs. Individual Rights

The respondents are less supportive of the regime norms on the three questions that deal with Collective-Individual Rights than on the three State-Private Control questions. But there is considerable variation in their answers. Seventeen percent of the respondents adopt the most extreme position in favor of protection of "the rights of society, even if an innocent person [accused of a crime] sometimes goes to prison." Eleven percent adopt the most extreme position against the right of workers to strike. But only 8% give the strongest possible endorsement of the requirement that citizens have residence permits to live in large cities.

It would not be correct to conclude from these comparisons that the respondents are more committed to the rights of the individual than they are to limiting state control. The balance between state/collective and private/individual responses is partly a function of which issues were included in the survey and

how the questions about those issues were worded. Other questions could have been chosen that would have made the respondents appear to be either more or less supportive of the regime.

Systemic Hostility and Regime Support

Even though a majority of the respondents report that they were satisfied with several aspects of their material quality of life in the USSR, 21% of the respondents were so hostile to the USSR that when asked "What would you keep" in the present Soviet system if a new system of government were created, they reported "Keep nothing."¹⁸ In addition, when asked "What would you change" in the Soviet system if a new government were created, 8% answered that they would "Change everything." And when asked, "In what ways do you think that the United States could learn from the Soviet Union," 18% answered that "the U.S. could learn nothing from the Soviet Union."

Inkeles and Bauer interpreted these kinds of answers from the Harvard Project refugees as indicators of hostility to the USSR, of fundamental antipathy to the system as a whole. But they did not interpret this hostility to mean that the emigrants rejected everything from their Soviet experience.

Table 3 reports the percentage distribution of support for the six regime norms among respondents who were judged as hostile to the USSR. These respondents are substantially less supportive of the regime norms than the respondents as a whole (compare with Table 2).

[PLACE TABLE 3 ABOUT HERE]

But despite the apparent conclusiveness of such phrases as "keep nothing" and "change everything," there is a residue of support for parts of the system even among those who are strongly antipathetic to the whole.¹⁹ For example, among those who volunteered that "the U.S. can learn nothing from the USSR," 48% give the strongest possible endorsement to state ownership of heavy industry. This may testify to how people's historical experience, that is, their socializa-

tion within a given political system, has shaped their fundamental beliefs about how the government ought to organize its work. In particular, support for collective control is not substantially lower among those hostile to the regime than among the respondents as a whole.

Explaining Individual Variation in Regime Support

The main objective of my research is to answer the questions: Is the variation in the level of regime support systematically related to differences in characteristics of the respondents? Who are the regime supporters? Who are the supporters of private interests and of individuals?

Answering these questions issue-by-issue is not the most fruitful approach. Considerations of measurement theory suggest that combining the items into multi-item indexes or measures is likely to provide more reliable and valid indicators of the theoretical variable. There are also technical reasons for combining the items, having to do with the heaping in the distribution of responses on the individual 7-point scales at the extreme and the middle positions.²⁰

Based on a factor analysis performed on the six items, the individual questions may be viewed as tapping into different points along two underlying continua of preferences or beliefs. Therefore, in the remainder of this analysis I use two three-item indexes: State-Private Control and Collective-Individual Rights. Each is a summated scale that is an average of the responses on the appropriate three items. Like the answers to the individual questions, the scores range from a high of 7 (State/Collective) to a low of 1 (Private/Individual), and 4 is the midpoint. However, the scores on the composite scales are continuous rather than being whole integers. For each scale, the higher the score, the greater the support for regime norms. Further information about the scales is reported in the Technical Appendix. Some evidence concerning the validity of the scales is provided in an Addendum.

Effects of Education

Panel A of Table 4 summarizes the bivariate relationships between level of education and the two measures of regime support. This evidence shows that education is negatively related to the level of regime support. This contradicts the expectation by some observers that education would be positively associated with support for the regime. The same pattern occurs on the Collective-Individual Rights measure: as education increases, the scores on the Collective-Individual Rights scale decrease.

[PLACE TABLE 4 ABOUT HERE]

That support for the regime declines with each step up in education suggests that possession of a critical frame of mind is not restricted to those with higher education. The decrease in support for regime norms associated with moving from less than complete secondary education to having complete secondary education is about as large as the decrease associated with moving from complete secondary education to having higher education. Moreover, support does not level off once a person obtains higher education; those with post-graduate education are even less supportive of the regime than are those with only completed higher education.

Since younger cohorts have advanced considerably in educational attainment over the older cohorts, it is important to determine whether the relations between education and regime support shown in Panel A are an artifact of cohort differences.²¹ Panels B through F of Table 4 (also Figures 2 and 3) show that the education effects are not an artifact of cohort differences: on the contrary, within every cohort, increasing education is associated with declining political support.²²

This does not mean that cohort effects are totally absent. Comparing levels of regime support across the cohorts within the same education category in Table 4 suggests that the youngest cohort, born in 1946-1960, is distinctly less sup-

portive of the regime than older cohorts. An appropriate method to test for cohort effects is to use multiple regression analysis, with each of the two regime norms measures taken in turn as dependent variables, and with each of the cohorts and educational levels entered into the equation as binary or dummy independent variables.

[PLACE FIGURES 2 AND 3 ABOUT HERE]

It is important to bear in mind that many respondents in the post-World War II cohort left the USSR before completing what would otherwise have been their highest level of education. To the extent that beliefs and attitudes are likely to reflect these respondents' expected level of education rather than simply their achieved level, the political beliefs of members of recent cohorts who had only secondary education or incomplete higher education might be more like those of people with higher levels of education -- namely, less supportive of the regime.

I tested for these special affects in the regression analysis. I include in the regression equations terms that reflect joint effects (interaction effects) between cohort and the four highest educational levels. If these interaction effects are large and statistically significant, then at least part of the distinctive attitudes of the post-War generation is could be due to frustration related to the inability to complete higher education (or to obtain other benefits associated with attaining higher levels of education).

Table 5 presents the results of these tests. Column 1 shows the equation for the additive model with State-Private Control as the dependent variable; column 2 shows the model for the same dependent variable with the interaction terms. Columns 3 and 4 show the analogous results with Collective-Individual Rights as the dependent variable. For neither dependent variable does the inclusion of the interaction effects increase the amount of variance accounted for; for neither are the b's (regression coefficients) for the interaction effects

statistically significant (see Columns 2 and 4). Thus, the additive models (in Columns 1 and 3) appear to represent best the relationships between cohort, education, and support for regime norms. Moreover, further analysis eliminates the remaining cohort effects on support for state control, but not the cohort effects on support for collective rights.²³

[PLACE TABLE 5 ABOUT HERE]

The relationships between cohort, education, and support for regime norms are summarized in Figure 4. Panel A depicts the relationships with State-Private Control as the dependent variable; Panel B, with Collective-Individual Rights as the dependent variable. For both dependent variables, the negative sign on the arrow leading from Educational Attainment reflects that fact that increases in education are associated with declining support for regime norms, independently of the cohort a person belongs to.

[PLACE FIGURE 4 ABOUT HERE]

In addition, Panel A shows that there is no distinctive cohort effect on support for state control of the economy. In contrast, Panel B shows that support for collective rights increases with age, even after differences in educational attainment are taken into account. This pattern could result from either a life-cycle (aging) or a generational effect. Regardless of the explanation, the youngest cohorts are less supportive of the rights of the collective and more supportive of the rights of the individual than the older cohorts, even after taking educational differences into account.

Effects of Material Satisfaction

Conventional scholarly wisdom expects that satisfaction of people's material needs generates support for the regime. If true, one should find a positive relationship between a respondent's income and his or her support for regime norms, even after adjusting for the effects of other factors that impinge on the level of regime support. Based on the results of the analysis to this point,

however, since education is inversely related to regime support, one might expect income also to be inversely related to regime support, for income is positively related to education.

It would be straightforward to adopt measures of a person's individual or family income or wealth as indicators of material well-being, but, judging from the theoretical literature about the sources of regime support, these are not the most appropriate measures to use. Rather than objective measures of material welfare, subjective measures of material satisfaction seem more appropriate, for it is the satisfaction of people's perceived wants, not merely the objective improvement of their material condition, that is said to generate support for the regime. Although there is usually a positive correlation between objective and subjective indicators of material well-being, the relationship is very complex.²⁴

Therefore, I use as my measure of perceived material well-being the "satisfaction" indicators discussed earlier.²⁵ In the following analysis, four material satisfaction variables are included. Each variable is a 4-point numeric scale, which I have recoded so that Very Dissatisfied is scored 1, and Very Satisfied is scored 4. Thus, the higher the score, the greater the reported satisfaction.²⁶ I will interpret the effects of the variables as a set but not discuss why some of the satisfaction items do better than others in accounting for regime support.

Table 6 presents regression equations with the measures of material satisfaction included. Inclusion of the material satisfaction measures increases the proportion of variance in State-Private Control accounted for by 13 percentage points. All of the material satisfaction indicators have the expected sign (though the coefficient for the housing variable is not statistically significant): the greater the material satisfaction, the greater the support for state control. This is strong evidence for the hypothesis that the subjective satis-

faction of material wants generates support for the established political order -- even while increases in the level of education tend to weaken such support.

[PLACE TABLE 6 ABOUT HERE]

At the same time, material satisfaction has only a modest effect on support for collective or individual rights. Only an additional 2.5% of the variance in Collective-Individual Rights is accounted for by the level of material satisfaction. Instead, support for individual rights is affected more strongly by the level of education and by differences between generations or cohorts. But for both measures, the initial hypothesis that there would be a payoff in regime support from satisfying people's material wants finds some corroboration.

The differences in the cohort effects on support for the two kinds of regime norm are more sharply defined in Table 6 than in Table 5. For the State-Private Control measure, none of the cohort effects is significantly different from zero, using the conventional .05 significance level as a criterion. Thus, the low support for state control in the post-War cohort noted in Table 5 appears to be a consequence of its comparatively low level of material satisfaction (relative to other respondents with the same levels of education). Hence, the comparatively weak support for state control found in the youngest cohort is probably an artifact of emigration experience (e.g., frustration over educational and early career aspirations), not a result of a preference for private control in and of itself.

Implications

The analysis to this point supports two conclusions. First, increases in education are linked to weakening of support for regime norms, independently of an individual's level of material satisfaction and independently of any trends associated with cohort differences. Second, increases in material satisfaction are associated with greater support for regime norms, regardless of the level of

education or the cohort. The implications of these results merit further attention.

The empirical evidence from the SIP General Survey suggests that the higher the level of education, the less the support for regime norms. That this pattern occurs among all cohorts, even among people who were at the end of their working lives in the USSR at the time of emigration, suggests that it is not an artifact of the emigration experience. But whether this relationship is a result of education per se, rather than of other factors that are correlated with education, is difficult to determine.

Education is not a simple surrogate for other measures of social status, such as income, occupation, or privilege. For this reason, characterizing the respondents by a composite socioeconomic status or social class measure would obscure more than it would reveal.

In addition, one should not infer that the disaffection with regime norms that is associated with high education is shared by the Soviet political elite. Even though a large proportion of the SIP respondents were highly educated members of the professions, few were members of any kind of political elite. Hence, most were not subject to the special selection or socialization linked to elite membership.

It is instructive to examine another survey result. The respondents were asked to rank themselves on a 10-point ladder, with the most privileged person in the Soviet Union at the top (ranked 10) and the person with the least privilege at the bottom (ranked 1). The 1,236 respondents (over 40% of all respondents) who reported that they had the least privilege had a mean score on the State-Private Control measure of 4.05, slightly below the mean for all respondents. At the same time, the 21 respondents (less than 1% of the total) who ranked themselves on the top rung of the privilege ladder had a mean State-Private Control score of 5.36.

Thus, those few respondents who considered themselves the most privileged were substantially more supportive of the regime than those who considered themselves the least privileged. Because of the small number of cases, this result is speculative. But assuming that the respondents' self-rankings on the privilege ladder correspond to their relative privilege in the Soviet Union, then the select set of highly privileged people among the SIP respondents provides evidence that highly privileged members of Soviet society are likely to be far more supportive of the regime than is the much larger "educated class" in which they are embedded.²⁷

Nonetheless, the apparent disaffection of the educated class presents a challenge for Soviet leaders. This is the middle class for whom the Big Deal was arranged. This class is growing in size and importance to the Soviet economy, but with its increasing political sophistication comes increasing disaffection.

Additional evidence for this interpretation can be found in the relation between the respondents' reported level of interest in politics and their support for regime norms. Table 7 presents the mean scores on the two measures of regime norms as a function of both education and level of interest in politics. In Panel A, as one scans from the upper left toward the lower right -- from persons who were "not at all interested" in politics and who had not completed secondary school, towards persons who were "very interested" in politics and had graduate education -- support for private control of the economy increases sharply.

Both education and level of interest contribute to the increase. Within each educational stratum, those with great interest in politics favor private control more often than those with little interest in politics. The same pattern of decreasing support for regime norms with increasing political sophistication appears in Panel B, which reports the means on the Collective-Individual Rights measure, but it is much weaker.

[PLACE TABLE 7 ABOUT HERE]

That persons with higher levels of material satisfaction are more supportive of the regime, even after education and cohort differences are taken into account, suggests that at least one strategy followed by the Party leaders to garner support has a measurable payoff. The Big Deal may be necessary to counter the disaffection associated with increasing education. To understand whether it can work, however, further investigation is needed into the factors that influence people's subjective sense of material well-being.

There is no simple equation between improvement in people's objective material status and their subjective perception of this status. But there is some structure to this relationship. A preliminary predictive model is shown in Table 8. This model is restricted to respondents who were married at the end of the last normal period in the USSR to facilitate the interpretation of the measures of family income and household size.

[PLACE TABLE 8 ABOUT HERE]

The model uses a summary measure of material satisfaction as the dependent variable (see the Technical Appendix). This variable ranges from +2.0 (most satisfied) to -2.0 (least satisfied). For independent variables, it includes dummy variables for the educational levels and birth cohorts. It also includes several measures of objective material well-being: the number of rubles per month earned by both spouses combined at the end of the last normal period, whether the respondent was working for pay during that time, the number of square meters of housing space the respondent had, and the number of people in the household.²⁸

In addition, three dummy variables represent whether the person lived in one of the closed cities at the end of the last normal period: Moscow, Leningrad, or Kiev.²⁹ One would expect people who lived in those cities to be more satisfied than those who did not. Interaction terms between the closed-city dummy variables and the housing space measure are included because the average amount of housing space is lower in the closed cities than in other cities; hence differ-

ences in the amount of housing space may have a different effect on people's sense of material satisfaction in those cities than elsewhere.³⁰

Table 8 shows that younger people are less satisfied with material conditions than older people, even after differences in educational attainment are taken into account. This result is consistent with the results of an opinion poll of the American population (Campbell, Converse, Rodgers 1976: ch. 5). In addition, among SIP respondents, the higher their education, the less satisfied people are with their material conditions. This result is also consistent with American studies and suggests that the higher people's aspirations, the lower their sense of material well-being.

Other factors increase material satisfaction. Some of these are conditions over which the government has some control. For example, family income from the main state job and the amount of housing space a person has are positively correlated with material satisfaction. Although this finding is not surprising, it is important to have it confirmed empirically.³¹

But residence in one of the closed cities, which one might expect to improve people's sense of material satisfaction, appears to work in the opposite direction. Even after adjusting for the effects of education, income, and age (birth cohort), Moscovites and Leningraders are distinctly less satisfied with their material conditions than are others. (The coefficient for Kiev is also negative, but it is not statistically significant.) This is ameliorated by the special premium that residents in Moscow and Leningrad place on obtaining additional housing space. For those from Moscow and Leningrad, each additional 20 square meters of housing space increases the satisfaction score by an average of .28, while the same additional 20 square meters for people not living in Moscow or Leningrad would increase the score by .06.³²

Figure 5 summarizes the relations among the main variables of interest in this analysis. For simplicity, the diagram omits the effects of age differences

and of residence in Moscow-Leningrad, as well as the weak, but positive, relation between education and objective material satisfaction.

[PLACE FIGURE 5 ABOUT HERE]

The diagram shows the positive relation between objective material conditions and subjective material satisfaction, as well as the positive relation between subjective material satisfaction and regime support. Figure 5 does not show a direct effect of objective material conditions on regime support because further statistical tests revealed that the effects of objective material conditions on regime support are completely mediated through subjective material satisfaction.

The negative sign on the arrow leading from education to regime support reflects that fact that increases in education are directly associated with declines in support for regime norms. The negative sign on the arrow leading from education to subjective material satisfaction suggests that increasing education reduces people's sense of material well-being. Hence, increases in education work through both direct and indirect paths to lessen political support.

Thus, subjective material satisfaction appears to act as a cognitive filter that transforms the effects of both objective material conditions and education on regime support. How that filter works merits further study.

Conclusion

This study provides empirical evidence for an interpretation of government-society relations in the Soviet Union based on an exchange: from the government to the society, a supply of material goods to satisfy people's wants; from the society to the government, a store of political capital in the form of support for the established political order. These are not the only items in the exchange, but they are important ones.³³

At the same time, the long-term growth of educational attainments works to undermine support for established institutional practices, both in the area of

state control of the economy and in the area of individual rights. The younger generation also appears to be substantially more supportive of individual rights, independently of levels of education.

The increase in education and the replacement of generations are dynamic phenomena that are likely to force continual renewal of the exchange agreement between society and the government. This is a very different process from that described by Fainsod. It is not just that "each new generation offers the ruling group a fresh opportunity to rebuild its mass support and to renew its life energies," but that each new generation offers the ruling group a new challenge: Can it keep the old arrangements intact?

My research suggests that there may be a workable strategy, but that it is complex. It involves not just the manipulation of objective opportunities and material rewards, which are heavily discounted by a population with rising material aspirations, but also the manipulation of perceptions. For example, Moscow and Leningrad are very desirable places to live. The great variety of stratagems Soviet citizens use to obtain residency permits testifies to this (Zaslavsky 1982: ch. 6). But former residents of Moscow and Leningrad were less satisfied with their material conditions than those who lived elsewhere.³⁴ This is probably due to their higher expectations.

A recently published report from a study of the subjective quality of life in Soviet cities also confirms that Moscovites and Leningraders are less satisfied with many aspects of their lives. On a wide range of objects of evaluation, Moscovites and Leningraders "working in leading sectors of the economy" appear to be less satisfied than Kievans and less satisfied than a cross-section of respondents from 27 large Soviet cities. This includes their satisfaction with housing, medical services, work, and "life as a whole." It even includes the evaluation of cultural services: 39% of the respondents from the 27 large cities thought those services were good, while 27% of the Moscovites, 25% of the Lenin-

graders, and 44% of the Kievans held the same positive judgment (Bozhkov and Golofast 1985).

Further analysis of the SIP General Survey data shows that even after their levels of subjective material satisfaction are taken into account, Moscovites and Leningraders are less supportive of established regime norms than are people from other large Soviet cities. Consistent with this finding, the proportion of respondents who reported that they "sometimes did not vote" or "never voted" during their last normal period in the USSR is substantially higher among Moscovites and Leningraders than among respondents who lived in other cities.³⁵ This evidence also alerts us to why an understanding of the bases of support for the Soviet regime requires study of the relations between state and society outside the dual capital cities.

Finally, understanding the sources of support for the regime requires serious empirical study of the relationship between objective conditions and subjective evaluations of the quality of material life as well as how people's evaluations of their material conditions affect their assessment of the political system as a whole. By relying on emigrants not just as reporters or informants about life in the Soviet Union but also as respondents whose individual experiences and political beliefs provide a clue to how the Soviet system works, we have been able to subject some of the common speculation about Soviet politics to empirical test.

ADDENDUM: A NOTE ON THE BEHAVIORAL CORRELATES OF REGIME SUPPORT

The measures of regime support used in this analysis are subjective. Analysis of the behavioral correlates of these attitudes is beyond the scope of this chapter. But an examination of the relationship between the measures of regime support and a few reported political behaviors helps to confirm that the subjective measures represent authentic attitudes.

One should not expect to find perfect congruence between attitudes and behavior. Moreover, a lack of congruence between beliefs and behavior does not mean that the subjective measures are invalid. The main reason for this is that the levels and types of political activity in which people engage are constrained by the institutional setting and by many factors in the individual's background or immediate circumstance.

Nonetheless, examination of the bivariate relationships between reported political behavior and the regime support measures that I have used provides some confirmation of the validity of the latter measures. I have focused on political activities that are indicators of regime support or of the avoidance of mobilized participation (see the chapters by Bahry and Zimmerman in this volume). I present summary statistics in Table A1 without further comment.³⁶

[PLACE TABLE A1 ABOUT HERE]

TECHNICAL APPENDIX: CONSTRUCTION OF COMPOSITE MEASURES

Regime Support. The measures of regime support are based on six questions. Respondents were asked to locate their own position on each question on a seven-point scale, which was shown on a card. A full illustration of one of the questions is presented here.

[READ ALOUD BY INTERVIEWER]

Some people in the Soviet Union say that the state should provide free medical care for all citizens.

Others believe that medical care should be provided and paid for privately.

Please look at this card and tell me where you would have placed yourself on this issue in (END OF LNP). You may have been at number 1, at number 7, or at any of the numbers in between.

[EXPLAIN: Those strongly in favor of the state providing medical care are at No. 1 and those strongly in favor of medical care being provided and paid for privately are at No. 7. People who aren't sure how they feel or who don't feel strongly on this issue are somewhere in the middle. Where would you have placed yourself in (END OF LNP)?]

[CARD SHOWN TO RESPONDENT]

01	02	03	04	05	06	07
STATE SHOULD PROVIDE MEDICAL CARE						MEDICAL CARE SHOULD BE PROVIDED AND PAID FOR PRIVATELY

The other five questions are:

Some people in the Soviet Union say that the state should own all heavy industry.

Others say that all heavy industry should be owned privately.

Some people in the Soviet Union believe that the state should control production and distribution of all agricultural products.

Others believe that all agricultural production and distribution should be private.

Some people in the Soviet Union say that the rights of individuals accused of crimes must be protected even if a guilty person sometimes goes free.

Others say that the rights of society must be protected, even if an innocent person sometimes goes to prison.

Some people in the Soviet Union believe that workers should not be able to strike, because strikes are costly.

Other people feel that all workers should have a right to strike, even if it means that certain services may be interrupted.

Some people in the Soviet Union believe that people should be required to have residence permits to live in the large cities so that the authorities can plan public services.

Others think that people should be completely free to live where they want.

Partly because of the length of the interviews, the interviewers were instructed not to pressure the respondents if they did not respond after a repetition of the question. The interviewers were also instructed to record an answer "I never thought about this in the Soviet Union" if the respondent did not answer the question for this reason. This is similar in intent to the use of a filter question. About 40% of all non-answers (including Don't Know, Refuse, and "Never thought about this") were of this type.

The response categories were recoded so that the high end of the scale corresponded with support for the state or collective position (coded 7) and the low end corresponded with the private or individual position (coded 1). A principal-components factor analysis of the six items revealed two distinct dimensions. The factor loadings, based on an oblimin rotation, are:³⁷

	FACTOR 1 "State-Private Control"	FACTOR 2 "Collective-Individual Rights"
State Industry	.751	.103
State Agriculture	.706	.256
State Medical Care	.595	.016
Right to Strike	.259	.669
Rights of Accused	-.185	.646
Residence Permits	.412	.587

The two factors account for 47.8% of the total variance. The correlation between the factors is .154.

To facilitate interpretation, I constructed two 3-item summated scales corresponding to the two factors rather than developing measures directly from factor scores. Answers coded DK, Refused, Not Applicable, Not Ascertained, and (volunteered) "Never Thought About It Then" were scored as missing on the given item. The numerical answers were then summed across the three items identified from the factor analysis as belonging to each scale, yielding a maximum possible value of 21 and a minimum of 3. Dividing the sum by the number of valid answers for the items in the given scale yields an average for the items answered, with a maximum possible of 7 and a minimum possible of 1.

The distribution of respondents by the number of State-Private Control questions that they answered is: 3 questions--2434 (87.1% of the respondents); 2 questions--241 respondents (8.6%); 1 question--87 respondents (3.1%); 0 questions--31 respondents (1.1%). The distribution for the Collective-Individual Rights questions is: 3 questions--2279 (81.6%); 2 questions--337 (12.1%); 1 question--117 (4.2%); 0 questions--60 (2.1%). Cases are included in the analysis using a given scale if the respondent gave at least one valid answer to the items

in that scale. Analyses using more restrictive criteria for keeping the cases in the analysis produced results that were very similar to those based on the more inclusive rule.

Descriptive statistics:

STATE-PRIVATE CONTROL

Mean: 4.133
Std. Dev.: 1.569
Minimum: 1.000 (Private)
Maximum: 7.000 (State)
N of Valid Cases: 2,762

COLLECTIVE-INDIVIDUAL RIGHTS

Mean: 2.762
Std. Dev.: 1.407
Minimum: 1.000 (Individual)
Maximum: 7.000 (Collective)
N of Valid Cases: 2,733

Material Satisfaction. The Material Satisfaction measure is based on answers to the following questions:

In (END OF LNP), how satisfied or dissatisfied were you with . . .

- a) your housing?
- b) (your/your family's) standard of living?
- c) public medical care?
- d) your job?
- e) the availability of consumer goods in your town?

Respondents were shown a card with the following answer categories: Very Satisfied, Somewhat Satisfied, Somewhat Dissatisfied, and Very Dissatisfied.

A factor analysis of the responses to these five items revealed a single underlying dimension to the responses. To simplify interpretation, the measure of Material Satisfaction is a summated scale.³⁸ For each item, answers of Very Satisfied were scored 2; Somewhat Satisfied, 1; Somewhat Dissatisfied, -1; and Very Dissatisfied, -2. Answers coded as DK, Refused, Not Applicable, or Not Ascertained were scored as missing in that item. Summing the valid answers over the five items yields a maximum possible score of 10 and a minimum possible of -10. Dividing this sum by the number of valid answers yields an average for the items answered, with a maximum possible of 2 and a minimum possible of -2.

The distribution of respondents by the number of questions that they answered is: 5 questions--2,127 (76.2% of respondents); 4 questions--588 (21.1%); 3 questions--55 (2.0%); 2 questions--9 (0.3%); 1 question--6 (0.2%); 0

questions--8 (0.3%). Cases are included in the analysis if the respondent gave at least one valid answer. Analyses using more restrictive criteria produced results that are very similar to those based on a more inclusive rule.

Descriptive statistics for the constructed measure:

Mean: 0.098
Std. Deviation: .919
Minimum: -2.000 (Dissatisfied)
Maximum: +2.000 (Satisfied)
N of Valid Cases: 2,785

A Test for Response Bias. It is important to know whether the respondents' evaluations of life in the USSR is colored by their assessment of their current situation in the US. One might expect that emigrants who are dissatisfied with their current conditions would take a more positive view of life in the Soviet Union, while those who are satisfied with life now will tend to denigrate conditions in the USSR. SIP respondents were asked:

Here is a [10-point] scale representing the quality of life. At the top of the ladder is the best possible life, and at the bottom of the ladder is the worst possible life.

Where on this scale would you put your life now?

They were then asked:

Where on the scale do you expect your life to be five years from now?

The mean answer to the first question is 5.4; the mean answer to the second question, 7.4. On average, then, people were optimistic about the next five years. Consistent with expectations, the bivariate correlations between the two measures of the quality of life in the US and the composite measure of Material Satisfaction with life in the USSR are negative: $-.05$ and $-.07$. Respondents who are more favorable about conditions in the US are likely to be less favorable about conditions in the USSR. But the correlations are very low.

When the subjective measures of quality of life in the US now and expected change in the quality of life in the next five years are added to the regression equation in Table 8, the coefficient for the variable measuring expected change

is not statistically significant.³⁹ The coefficient for the "life now" question is statistically significant but very small ($b = -.026$). Moreover, the coefficients for the other variables in the equation are changed only slightly.

Thus, if any bias to the respondents' assessment of the quality of life in the USSR is caused by their feelings about their quality of life in the US, it is that positive feelings about life in the US tend to deflate people's assessment of life in the USSR. But the amount of bias from this source is negligible. To illustrate, if respondents' assessment of life in the USA increased by an amount equal to one standard deviation (2.14) on the "life now" ladder, their score on the Material Satisfaction measure would decline by just .05, which is extremely small when compared with the standard deviation of .92 on this measure. An analogous test for the effects of "life now" on the respondents' support for Soviet regime norms produced a similar result.

NOTES

*ACKNOWLEDGMENTS: I would like to thank Paul R. Abramson, Barbara A. Anderson, Jeremy R. Azrael, Robert W. Jackman, and James W. Tong for their comments on earlier drafts of this chapter; Harriet Dhanak for programming assistance; Mike Coble, Kathleen Duke, and Amy Hsu for preparing the graphs; and Cynthia Buckley and Victoria Velkoff for research assistance.

¹ I assume that the greater people's support for the procedures or practices by which decisions are made, then the greater the legitimacy of established practices and hence also the greater the government's "credit" or "store of capital." Easton's concept of "diffuse support" is useful here. Diffuse support is a "reservoir of credit upon which a system may draw in times when things are going badly from the point of view of providing satisfactions to the members of the system" (Easton 1965: 249). This is essentially what Colton refers to as a "store of political capital."

² In addition to the Harvard Project study (see Inkeles and Bauer 1968), one notable exception is Gitelman 1977.

³ Andrei Amalrik was probably correct in asserting that "no one, not even the bureaucratic elite, knows exactly what attitudes prevail among the wider sections of the population (Amalrik 1970: 32). However, an intelligent analyst of Soviet public opinion polling can learn a great deal about factors that shape many attitudes and behaviors of the Soviet public. The best example of such an analysis is that by Mickiewicz 1981.

⁴ For a discussion of many of the issues involved, see Millar's introduction to this volume, and Bahry 1985.

⁵ See Anderson and Silver 1986a; and Anderson, Silver, and Lewis 1986, and the chapter on "The SIP General Survey Sample" in this volume.

⁶ This is essentially the argument presented by Inkeles and Bauer 1968: 260; and Gitelman 1977: 547. A concomitant of this argument is that using measures of association that are dependent on the amount of variance in the sample is likely to be misleading. For this reason, in regression analyses my main concern is with the size of the unstandardized, not the standardized, regression coefficients. For further discussion of this issue, see Blalock 1967.

⁷ This is the basic approach to the bias question taken by DiFranceisco and Gitelman 1984.

⁸ The "last normal period" (LNP) refers to the five years preceding the month before the emigrants' life was seriously disrupted in connection with their decision to emigrate. For most respondents, the LNP ended in the month before they applied to OVIR for an exit visa.

⁹ For further analysis, see the chapter by Millar and Clayton in this volume.

¹⁰ When applied categorically, such an assumption is contradicted by considerable evidence generated in surveys of Soviet emigrants. For example, Mickiewicz (1981: 2) asserts that "The problem here [with surveys based on former Soviet ci-

tizens] is that though their testimony is dramatic, interesting, and often profound, it is, again, unrepresentative; that is, one cannot say anything about what forms attitudes for broad segments of Russian society. The reasons are well known. People who leave that society are not only those who are able to do so (a small minority of the population), but also those who have already formed negative opinions about the society."

¹¹ This was an open-ended question. Up to three answers were coded for each respondent. On average, the respondents gave two reasons for leaving. It is not possible to classify all responses unambiguously. I count "antisemitism" as a religious-cultural reason. However, respondents who report "antisemitism" as their reason for leaving the USSR could have left for material reasons if they suffered from discrimination in school or work.

¹² Five percent of all responses did not fall into one of these categories. These include references to the respondent's desire "for adventure" or "to see the world" as well as statements that the respondent emigrated to avoid military service by himself or another family member. I exclude cases where the respondent did not answer the question or where the answer did not fall into one of the four categories described above. Because multiple responses were coded, although about five percent of all responses did not fall into one of the four categories, only two percent of all respondents are not classified into one of the groups described here.

¹³ For an informative discussion of this theme, see Osborn 1970: ch. 3.

¹⁴ I use the term "regime norms" to refer to the goals and norms of political behavior, in particular those related to the balance of control between the state and society. These goals and norms are not necessarily "legal" or "constitutional." For a similar usage of the term, see Easton and Dennis 1967. Thus, I do not use the term "regime" as synonymous with "leaders" or "ruling group," which are common uses of the term.

¹⁵ See the Technical Appendix for information about the factor analysis.

¹⁶ This is the distribution of responses, not the distribution of respondents. Up to three answers were coded per respondent.

¹⁷ Complementary evidence is found in the answers to another open-ended question: "In what ways do you think that the United States could learn from the Soviet Union?" The five most frequent responses were: 1) dealing better with crime; 2) improving the educational system; 3) the US could "learn nothing"; 4) improving the system of health care; and 5) improving the national defense.

¹⁸ This question was asked of a random one-third of the respondents. The number who answered the question (not coded Don't Know, Refused, or Not Ascertained) was 809. The percentages are calculated on this base number.

¹⁹ For similar results, see Gitelman 1977.

²⁰ Many respondents preferred an extreme position (1 or 7) and found it difficult to take a middle position or one that shaded toward the middle but was not exactly at the midpoint of 4. Hence these variables assume the properties of dichotomous or trichotomous variables. For analyzing answers to individual items, it would be more appropriate to use probit or logit models rather than ordinary least-squares regression (Aldrich and Nelson 1984). By combining the answers into multi-item scales, however, the distributions appear as continuous variables with little heaping of responses at the extreme or middle positions.

²¹ Differences among cohorts are not necessarily what are understood in the technical social scientific literature as cohort or generational effects rather than life-cycle or aging effects. With cross-sectional data, one cannot choose definitively between these two interpretations of trends from one cohort to the next. But it is possible to determine whether differences among cohorts in the level of political support are artifactual; for example, they might result from differences in educational level among cohorts.

²² The few exceptions occur where the number of cases is very small.

²³ That inclusion of the nonadditive terms in Equation 2 raises the standard error of the main coefficient for the 1946-1960 birth cohort so much that the coefficient is not statistically significant (the same does not occur for the analogous coefficient in Equation 4) could mean that the cohort difference is an artifact of the special emigration-related experiences of that cohort. Respecifying Equation 2, omitting the "main effect" dummy variable for the cohort, but including the terms expressing the joint effects with education, results in the coefficients for all three interaction terms being statistically significant. Moreover, later analysis (see Table 6) eliminates evidence for a cohort effect on State-Private Control.

²⁴ For a discussion of the issues involved, see Campbell, Converse, and Rodgers 1976; and Andrews and Withey 1976.

²⁵ A factor analysis of the responses to the five items revealed a single underlying dimension to the responses (see the Technical Appendix). A composite measure constructed from these items should be a more reliable measure of overall satisfaction than the individual indicators. I use it in analyses with Material Satisfaction as a dependent variable. However, preliminary analysis showed that for measuring material satisfaction as an explanatory variable, the separate indicators provided a much better fit in the regression model than did the composite measure. The "satisfaction with job" variable is omitted because it was not answered by over 500 of the respondents -- by respondents who were not working in the last normal period of life in the USSR.

²⁶ Preliminary analysis showed that it made little difference whether the variables were treated as interval-level variables (scored 1 to 4) or were broken into dummy variables representing the different levels of agreement.

²⁷ The data do not support the expectation that respondents who had been military officers would be more supportive of regime norms than those who had not. Regardless of whether or not they had served on active duty, officers were

less supportive of regime norms than non-commissioned officers, corporals, privates, and ordinary seamen.

²⁸ The last variable is included as a method of per capitizing both the housing space variable and the family income variable. The model is restricted to married couples because the measures of respondent's and spouse's income are more reliable than reports of gross family income. See Anderson and Silver, 1986c.

²⁹ Twenty-one percent of the respondents are from Leningrad, 21% from Moscow, and 12% from Kiev.

³⁰ For respondents who were married during the LNP, the average number of square meters of housing space for Moscovites, Leningraders, and Kievans was 37 (virtually identical for the three cities). For married respondents who were not living in one of those three cities, the average was 46 square meters.

³¹ Respondents who earned income in the private sector were less satisfied with their material quality of life than those who did not have private income, even after taking into account the effects of education, cohort, and level of income from the main job. It seems plausible that lower material satisfaction causes people to seek private work to supplement their income. I also tested for bias in the material satisfaction measure caused by the level of satisfaction the respondents had with the quality of life in the United States. I found a negligible effect of this source. See the Technical Appendix for details.

³² From the results reported in Table 8, the payoff per square meter increase in housing space is .0029 if the person does not live in Moscow or Leningrad, but is .0029 + .112 for Moscovites and .0029 + .109 for Leningraders.

³³ The notion of a contract between state and society has also been discussed by Breslauer 1978 and 1982; Zaslavsky 1982: ch. 6; and Cohen 1985: ch. 5.

³⁴ Respondents who had "No Jewish Connection," most of whom were political refugees, disproportionately resided in Moscow and Leningrad in the last normal

period. I re-estimated the equation in Table 8 excluding cases with "No Jewish Connection." This did not substantially affect the pattern of relationships.

³⁵ Among the respondents who lived outside one of the closed cities in the Soviet Union, 77% report that they "always voted" during their last normal period. Among Moscovites, the corresponding percentage is 62; among Lenin-graders, 55. (Among Kievans, 80).

³⁶ Ideally, one would like to have an external standard for evaluating the validity of survey responses. This is rarely possible. Studies of American political behavior show that survey respondents commonly exaggerate how often they vote because of a propensity to give socially desirable responses to the interviewer (see Anderson and Silver 1986b; and Silver, Anderson, and Abramson 1986. Whether an analogous pattern of misreporting occurred among SIP respondents cannot be determined.

³⁷ Since the scales used in the analysis are Likert scales rather than based on the factor loadings, the choice of solutions is not critical. However, my method of scale construction permits the two regime norms measures to be correlated with one another ($r=.22$). For a discussion of summated, or Likert, scales, see Anderson, Basilevsky and Hum 1983.

³⁸ An alternative measure, using the factor loadings to generate a factor score, performed almost identically to the summated scale in the analysis.

³⁹ The expected change is the difference between where the respondents expect their lives to be five years from now and where they place themselves now.

REFERENCES

- Abramson, Paul R. 1983. Political Attitudes in America: Formation and Change. San Francisco: Freeman.
- Aldrich, John H., and Forrest D. Nelson. 1984. Linear Probability, Logit, and Probit Models. Beverly Hills: Sage Publications.

- Amalrik, Andrei. 1970. Will the Soviet Union Survive Until 1984? New York: Harper.
- Anderson, Andy B., Alexander Basilevsky, and Derek P. J. Hum. 1981. Measurement: Theory and Techniques. Pp. 231-287 in Peter H. Rossi, James D. Wright, and Andy B. Anderson, eds., Handbook of Survey Research. New York: Academic Press.
- Anderson, Barbara A., and Brian D. Silver. 1986a. Descriptive Statistics for the Sampling Frame Population. Soviet Interview Project. Working Papers, No. 2.
- Anderson, Barbara A., and Brian D. Silver. 1986b. Measurement and Mismeasurement of the Validity of Self-Reported Vote. American Journal of Political Science 30 (August).
- Anderson, Barbara A., and Brian D. Silver. 1986c. The Validity of Survey Responses: Interviews of Multiple Respondents in a Household from a Survey of Soviet Emigrants. University of Michigan Population Studies Center. Research Reports, No. 86-89.
- Anderson, Barbara A., Brian D. Silver, and Robert A. Lewis. 1986. Demographic Estimates for the Post-Sampling Weights of the SIP General Survey. Soviet Interview Project. Working Papers, No. 4.
- Andrews, Frank M., and Stephen B. Withey. 1976. Social Indicators of Well Being: Americans' Perceptions of Life Quality. New York: Plenum.
- Azrael, Jeremy R. 1965. Soviet Union. Pp. 233-272 in James S. Coleman, ed., Education and Political Development. Princeton: Princeton University Press.
- Bahry, Donna. 1985. Surveying Soviet Emigrants: Political Attitudes and Ethnic Bias. Manuscript, New York University.
- Bialer, Seweryn. 1980. Stalin's Successors: Leadership, Stability, and Change in the Soviet Union. New York: Cambridge University Press.
- Blalock, Hubert M., Jr. 1967. Causal Inferences, Closed Populations, and Measures of Association. American Political Science Review 61 (March): 130-136.
- Bozhkov, Oleg B., and Valerii B. Golofast. 1985. Otsenka naseleniem uslovii

- zhizni v krupnykh gorodakh. Sotsiologicheskie issledovaniia, No. 3: 95-100.
- Breslauer, George W. 1978. On the Adaptability of Soviet Welfare-State Authoritarianism. Pp. 3-25 in Karl W. Ryavec, ed., Soviet Society and the Communist Party. Amherst: University of Massachusetts Press.
- Breslauer, George W. 1982. Khrushchev and Brezhnev as Leaders: Building Authority in Soviet Politics (London: George Allen & Unwin).
- Bushnell, John. 1980. The 'New Soviet Man' Turns Pessimist. Pp. 179-199 in Stephen F. Cohen, Alexander Rabinowitch, and Robert Sharlet, eds. The Soviet Union since Stalin. Bloomington: Indiana University Press.
- Campbell, Angus, Philip E. Converse, and Willard L. Rodgers. 1976. The Quality of American Life: Perceptions, Evaluations, and Satisfaction. New York: Russell Sage Foundation.
- Cohen, Stephen F. 1965. Rethinking the Soviet Experience: Politics and History since 1917. New York: Oxford University Press.
- Colton, Timothy E. 1984. The Dilemma of Reform in the Soviet Union. New York: Council on Foreign Relations.
- DiFranceisco, Wayne, and Zvi Gitelman. 1984. Soviet Political Culture and 'Covert Participation' in Policy Implementation. American Political Science Review 78 (September): 603-621.
- Dobson, Richard B. 1980. Education and Opportunity. Pp. 115-137 in Jerry G. Pankhurst and Michael Paul Sacks, eds. Contemporary Soviet Society: Sociological Perspectives. New York: Praeger.
- Dunham, Vera S. 1976. In Stalin's Time: Middleclass Values in Soviet Fiction. Cambridge: Cambridge University Press.
- Easton, David. 1965. A Systems Analysis of Political Life. New York: Wiley.
- Easton, David, and Jack Dennis. 1967. The Child's Acquisition of Regime Norms: Political Efficacy. American Political Science Review 61 (March): 25-38.
- Fainsod, Merle. 1961. How Russia Is Ruled. Cambridge: Harvard University Press.

Gitelman, Zvi. 1977. Soviet Political Culture: Insights from Jewish Emigres.

Soviet Studies 29 (October): 543-564.

Inkeles, Alex, and Raymond Bauer. 1968. The Soviet Citizen: Daily Life in a Totalitarian Society. New York: Atheneum.

Jackman, Mary R., and Michael J. Muha. 1984. Education and Intergroup Attitudes: Moral Enlightenment, Superficial Democratic Commitment, or Ideological Refinement? American Sociological Review 49 (December): 751-769.

Kassof, Allen. 1964. The Administered Society: Totalitarianism without Terror. World Politics 16 (July): 558-575.

Mickiewicz, Ellen Proper. 1981. Media and the Russian Public. New York: Praeger.

Moore, Barrington, Jr. 1954. Terror and Progress USSR: Some Sources of Change and Stability in the Soviet Dictatorship. New York: Harper & Row.

Osborn, Robert J. 1970. Soviet Social Policies: Welfare, Equality, and Community. Homewood: Dorsey Press.

Rigby, T. H. 1964. Traditional, Market, and Organizational Societies and the USSR. World Politics 16 (July): 539-557.

Silver, Brian D., Barbara A. Anderson, and Paul R. Abramson. 1986. Who Over-Reports Voting? American Political Science Review 80 (June).

Wright, James D. 1976. The Dissent of the Governed: Alienation and Democracy in America. New York: Academic.

Zaslavsky, Victor. 1982. The Neo-Stalinist State: Class, Ethnicity, and Consensus in Soviet Society. Armonk: M. E. Sharpe.

TABLE 1. Percent of Respondents Who Reported Given Reason for Emigration, by Sex, Education, Year of Birth, Ethnicity, and Role in Emigration Decision

	Religious, Ethnic	Family, Friends	Economic	Political	Base N
<u>All</u>	45.8	48.0	26.9	43.3	2,763 ^a
<u>Sex</u>					
Men	49.5	39.2	28.1	52.3	1,201
Women	43.0	54.8	26.1	36.3	1,562
<u>Education</u>					
Advanced Education	45.2	26.9	29.0	68.8	93
Complete Higher	45.9	38.6	26.0	58.1	907
Some Higher	47.2	31.4	30.2	57.9	159
Complete Secondary	46.4	51.7	29.7	37.1	1,124
Less than Comp. Sec.	44.2	66.9	20.6	19.8	480
<u>Year of Birth</u>					
1905-1910	43.3	64.2	11.9	16.4	67
1911-1915	44.2	74.4	16.3	22.9	258
1916-1920	46.4	71.1	18.7	21.1	166
1921-1925	48.7	64.2	22.4	28.4	232
1926-1930	44.6	55.4	19.2	37.5	224
1931-1935	46.2	49.3	23.3	51.6	223
1936-1940	49.6	38.0	27.8	48.9	421
1941-1945	41.1	41.9	28.6	46.8	248
1946-1950	45.6	35.3	34.2	54.4	476
1951-1955	46.0	37.1	36.4	54.3	291
1956-1960	42.9	32.7	37.8	54.5	156
<u>Nationality^b</u>					
Religious Jew	55.4	52.6	20.7	29.8	523
Non-Religious Jew	50.7	47.7	29.0	42.7	1,749
Parents Jewish	22.7	35.2	31.3	66.4	128
Spouse Jewish ^c	21.8	48.9	29.3	55.5	229
No Jewish Connection	7.5	45.5	16.4	60.4	134
<u>Role in Decision</u>					
<u>To Emigrate</u>					
Made the Decision	45.7	38.8	27.3	52.9	905
Shared in Decision	48.3	50.0	27.6	40.4	1,642
No Significant Role	28.0	71.5	19.8	24.2	207

^a Cell entries add to more than 100 across the rows because up to three reasons were coded for each respondent.

^b The "Nationality" variable used here is a composite of self-designated nationality, religion, and religiosity, as well as the respondent's report of nationality and religion of parents, spouse, and spouse's parents.

^c Includes seventeen cases where the spouse's parents were Jewish but spouse was identified by the respondent as non-Jewish.

TABLE 2. Percentage Distribution of Responses to Questions on Institutional Norms

	PRIVATE- INDIVIDUAL					STATE- COLLECTIVE				
	1	2	3	4	5	6	7	Pct.	Mean	N

<u>STATE-PRIVATE CONTROL</u>										
Medical Care	6.7%	2.7	5.7	19.0	8.2	5.2	52.3	99.8%	5.45	2,731
Heavy Industry	20.1%	5.7	7.4	17.6	7.0	4.4	37.9	100.1%	4.51	2,499
Agriculture	59.1%	9.5	7.3	10.7	2.5	1.2	9.7	100.0%	2.30	2,652
<u>COLLECTIVE-INDIVIDUAL RIGHTS</u>										
Rights of Accused	25.1	8.4	10.4	27.1	7.0	4.8	17.2	100.0%	3.66	2,436
Right to Strike	42.9%	11.5	10.3	15.9	4.8	3.1	11.5	100.0%	2.84	2,501
Residence Permits	76.2%	5.1	2.5	5.2	1.8	1.7	7.6	100.1%	1.87	2,699

^a See the Technical Appendix for wording of the questions. Answers coded as Don't Know, Refused, Not Ascertained, or "Never Thought About It Then" are treated as missing. The answers to the Rights of Accused question were inverted to conform with the arrangement of the other items from high state/collective support to low state/collective support.

TABLE 3. Percentage Distribution of Support for Regime Norms Among Respondents Who Are "Hostile" to the Soviet System^a

A. Respondents Who Said
Keep Nothing in USSR

	PRIVATE- INDIVIDUAL					STATE- COLLECTIVE				
	1	2	3	4	5	6	7	Pct.	Mean	N
Medical Care	17.7%	4.9	9.1	22.6	9.8	4.9	31.1	100.1%	4.41	164
Heavy Industry	38.6%	3.9	8.5	19.0	5.2	3.9	20.9	100.0%	3.44	153
Agriculture	70.8%	9.3	7.5	5.6	0.6	2.5	3.7	100.0%	1.78	161
Rights of Accused	30.8%	8.3	5.8	26.3	3.2	5.8	19.9	100.1%	3.60	156
Right to Strike	53.1%	13.1	5.0	12.5	4.4	1.9	10.0	100.0%	2.75	160
Residence Permits	87.6%	4.3	1.9	0.6	0.6	0.0	5.0	100.0%	1.42	161

B. Respondents Who Said
Change Everything in USSR

	1	2	3	4	5	6	7	Pct.	Mean	N
Medical Care	15.3%	3.4	8.5	22.0	6.8	6.8	37.3	100.1%	4.71	59
Heavy Industry	30.9%	7.3	5.5	16.2	1.8	3.6	32.7	100.0%	3.94	55
Agriculture	65.0%	10.0	10.0	5.0	0.0	1.7	8.3	100.0%	3.03	60
Rights of Accused	34.5%	6.9	6.9	22.4	3.4	3.4	22.4	99.9%	3.53	58
Right to Strike	48.3%	6.9	8.6	20.7	5.2	1.7	8.6	100.0%	2.67	58
Residence Permits	86.7%	1.7	1.7	3.3	1.7	0.0	5.0	100.1%	1.52	60

C. Respondents Who Said
US Can Learn Nothing From USSR

	1	2	3	4	5	6	7	Pct.	Mean	N
Medical Care	11.4%	4.0	3.8	19.2	6.9	6.5	48.2	100.0%	5.18	443
Heavy Industry	28.7%	6.9	7.4	18.0	5.6	4.6	28.9	100.1%	3.94	394
Agriculture	64.0%	10.2	6.5	8.6	1.9	1.4	7.4	100.0%	2.08	431
Rights of Accused	31.0%	9.2	12.1	25.9	4.9	3.3	13.6	100.0%	3.29	390
Right to Strike	47.6%	11.7	9.7	13.3	3.2	2.4	12.1	100.0%	2.69	412
Residence Permits	79.2%	3.8	1.6	3.8	1.1	1.8	8.6	99.9%	1.83	443

^a The "What would you keep" and "What would you change" questions were addressed to a third of the respondents. Of those who responded, 21% said they would "keep nothing" and 8% said they would "change everything." The "What could the U.S. Learn" question was addressed to all respondents. Of those who answered, 18% said, "Nothing."

TABLE 4. Mean Scores on State Control and Individual Rights, by Education and Year of Birth (1=Private/Individual, 7=State/Collective)

	State Control		Individual Rights	
	Mean	N	Mean	N
A. <u>All Respondents</u>				
Less than Comp. Secondary	4.75	468	3.13	452
Complete Secondary	4.20	1125	2.78	1118
Some Higher Education	3.85	161	2.65	160
Completed Higher	3.81	913	2.62	908
Advanced Education	3.62	95	2.26	95
All Cases	4.13	2762	2.76	2733
B. <u>Born 1905-1915</u>				
Less than Comp. Secondary	4.66	146	3.56	140
Complete Secondary	4.44	107	2.95	103
Some Higher Education	4.47	13	3.33	13
Completed Higher	3.84	50	3.00	50
Advanced Education	5.00	3	3.33	3
All Born 1905-1915	4.45	319	3.26	309
C. <u>Born 1916-1925</u>				
Less than Comp. Secondary	4.80	148	2.98	140
Complete Secondary	4.33	159	3.01	157
Some Higher Education	3.79	11	3.05	11
Completed Higher	4.20	72	2.65	71
Advanced Education	3.94	6	2.61	6
All Born 1916-1925	4.46	396	2.93	385
D. <u>Born 1926-1935</u>				
Less than Comp. Secondary	4.58	100	2.80	98
Complete Secondary	4.40	146	2.82	145
Some Higher Education	4.19	18	2.63	17
Completed Higher	4.14	162	2.78	160
Advanced Education	4.00	22	2.36	22
All Born 1926-1935	4.32	448	2.77	442
E. <u>Born 1936-1945</u>				
Less than Comp. Secondary	5.21	53	3.16	53
Complete Secondary	4.34	261	2.82	260
Some Higher Education	3.85	30	2.72	30
Completed Higher	3.81	284	2.58	282
Advanced Education	3.62	45	2.19	45
All Born 1936-1945	4.11	673	2.70	670
F. <u>Born 1946-1960</u>				
Less than Comp. Secondary	4.62	21	2.74	21
Complete Secondary	4.01	452	2.64	453
Some Higher Education	3.70	89	2.49	89
Completed Higher	3.59	344	2.53	344
Advanced Education	2.86	19	2.00	19
All Born 1946-1960	3.81	925	2.57	926

TABLE 5. Regression of Regime Support onto Education and Year of Birth
(1=Private/Individual, 7=State/Collective)^a

	State-Private Control		Collective-Indiv. Rights	
	b	(Sig.)	b	(Sig.)
	(1)	(2)	(3)	(4)
<u>Education Dummy Variables</u>				
Complete Secondary Education	-.38 (<.001)	-.37 (<.001)	-.18 (<.028)	-.19 (.036)
Some Higher Education	-.69 (<.001)	-.69 (<.001)	-.28 (.037)	-.21 (.238)
Complete Higher Education	-.79 (<.001)	-.77 (<.001)	-.32 (<.001)	-.35 (<.001)
Advanced Education	-1.04 (<.001)	-.90 (<.001)	-.71 (<.001)	-.68 (<.001)
<u>Cohort Dummy Variables</u>				
Born 1916-25	.05 (.665)	.05 (.677)	-.31 (.004)	-.31 (.004)
Born 1926-35	.07 (.557)	.06 (.614)	-.39 (<.001)	-.39 (<.001)
Born 1936-45	-.05 (.681)	-.06 (.597)	-.43 (<.001)	-.42 (<.001)
Born 1946-60	-.36 (<.001)	-.11 (.749)	-.57 (<.001)	-.65 (.039)
<u>Cohort-Educ. Interaction Terms</u>				
Born 1946-60*Comp. Secondary		-.24 (.490)		.08 (.795)
Born 1946-60*Some Higher		-.23 (.583)		-.04 (.918)
Born 1946-60*Comp. Higher		-.27 (.458)		.14 (.665)
Born 1946-60*Adv. Education		-.85 (.101)		-.05 (.908)
Constant	4.74 (<.001)	4.73 (<.001)	3.39 (<.001)	3.39 (<.001)
Adjusted R ²	.055	.055	.029	.028
Number of Cases	2761	2761	2732	2732

^a The omitted categories (reflected in the Constant) are Less than Complete Secondary Education and Born 1905-1915.

TABLE 6. Regression of Regime Support onto Level of Material Satisfaction, Education, and Year of Birth (1=Private/Individual, 7=State/Collective)^a

	State-Private Control		Collective-Indiv. Rights	
	-----		-----	
	b	(Sig.)	b	(Sig.)
	(1)		(2)	
<u>Education Dummy Variables</u>				
Complete Secondary Education	-.20	(.018)	-.08	(.358)
Some Higher Education	-.24	(.086)	-.07	(.611)
Complete Higher Education	-.37	(<.001)	-.11	(.220)
Advanced Education	-.41	(.016)	-.46	(.005)
<u>Cohort Dummy Variables</u>				
Born 1916-25	.00	(.970)	-.39	(<.001)
Born 1926-35	.12	(.282)	-.45	(<.001)
Born 1936-45	.13	(.206)	-.42	(<.001)
Born 1946-60	-.15	(.139)	-.54	(<.001)
<u>Material Satisfaction Variables</u>				
Medical Care	.39	(<.001)	.09	(<.003)
Goods	.28	(<.001)	.16	(<.001)
Standard of Living	.13	(<.001)	.06	(.091)
Housing	.04	(.233)	.03	(.280)
Constant	2.41	(<.001)	2.50	(<.001)
Adjusted R ²	.188		.054	
Number of Cases	2595		2574	

^a The omitted categories from the dummy variables (reflected in the Constant) are Less than Complete Secondary Education and Born 1905-1915.

TABLE 7. Mean Scores on State Control and Individual Rights, by Education and Level of Political Interest

A. Means for State-Private Control
(1=Private, 7=State)

	Educational Attainment					N
	Less than Comp. Sec.	Comp. Sec.	Some Higher	Comp. Higher	Advanced	
Interested in Politics? ^a						
Not at All	5.02	4.70	4.25 ^b	4.39	5.11 ^c	521
Slightly	4.58	4.50	3.83	3.99	3.83 ^d	439
Somewhat	4.51	4.07	4.03	3.99	4.07 ^e	1048
Very	4.25	3.76	3.49	3.47	3.17	745
N	464	1122	161	911	95	2753

B. Means for Collective-Individual Rights
(1=Individual, 7=Collective)

	Educational Attainment					
	Less than Comp. Sec.	Comp. Sec.	Some Higher	Comp. Higher	Advanced	N
Interested in Politics? ^a						
Not at All	3.42	3.16	2.38 ^b	3.01	2.56 ^c	498
Slightly	2.98	2.90	2.70	2.87	2.60 ^d	438
Somewhat	2.83	2.69	2.90	2.63	2.47 ^e	1045
Very	2.88	2.51	2.40	2.49	2.01	744
N	447	1116	160	907	95	2725

^a "During your last normal period [of life in the USSR], how interested were you in politics and public affairs -- were you very interested, somewhat interested, only slightly interested, or not at all interested?"

^b Base N in cell: 19 cases in Panel A, and 18 cases in Panel B.

^c Base N in cell: 3 cases.

^d Base N in cell: 12 cases.

^e Base N in cell: 32 cases.

TABLE 8. Regression of Material Satisfaction on Education, Family Income, Housing Space, and Residence in Closed Cities among Married Couples (2.0=Maximum Material Satisfaction; -2.0=Minimum Material Satisfaction)

	Material Satisfaction	
	b	(Sig.)
<u>Education Dummy Variables</u>		
Complete Secondary Education	-.21	(<.001)
Some Higher Education	-.54	(<.001)
Complete Higher Education	-.58	(<.001)
Advanced Education	-.80	(<.001)
<u>Cohort Dummy Variables</u>		
Born 1916-25	.03	(.779)
Born 1926-35	.03	(.774)
Born 1936-45	-.15	(.104)
Born 1946-60	-.28	(.003)
<u>Objective Material Status in LNP</u>		
Family Income (rubles per mo.) ^a	.0011	(<.001)
Was Person Working? ^b	.17	(<.001)
Square Meters of Housing Space ^a	.0029	(<.001)
Number of People in Household	-.041	(.019)
<u>Lived in Closed City: Dummy Variables</u>		
Moscow	-.46	(<.001)
Leningrad	-.58	(<.001)
Kiev	-.19	(.176)
Moscow*Square Meters	.0112	(.001)
Leningrad*Square Meters	.0109	(<.001)
Kiev*Square Meters	.0030	(.387)
Constant	.164	(.142)
Adjusted R ²	.144	(<.001)
Number of Cases	1952	

^a "Family Income" is sum of husband's and wife's income from main job at the end of the last normal period of life (LNP) in the USSR. Respondents were also asked about their spouse's income. In cases where both spouses were respondents to the survey but one of them did not answer the question on his/her own or spouse's income, the spouse's report was used if available. The same procedure was used to estimate missing data on housing space.

^b Those who worked at any time during 5 years leading up to the end of the LNP are counted as working (coded 1). Those who never worked in that period or who never worked at all in the USSR are counted as not working (coded 0).

TABLE A1. Mean Scores on State-Private Control and Collective-Individual Rights, by Reported Political Behavior (1=Private/Individual, 7=State/Collective)

	State-Private Control	Collective-Indiv. Rights
<hr/>		
<u>Did Respondent Always Vote in LNP?</u>		
Always Voted	4.4	2.9
Sometimes Did Not Vote	3.7	2.5
Never Voted in LNP	3.3	2.4
<u>Was Respondent a Komsomol Activist?</u>		
Yes	3.1	2.7
No	3.9	2.7
<u>Attended An Unofficial Art Show?</u>		
Yes	3.6	2.5
No	4.3	2.8
<u>Took Part in Unsanctioned Study Group?</u>		
Yes	3.5	2.4
No	4.2	2.8
<u>Read Samizdat/Tamizdat?</u>		
Yes	3.5	2.5
No	4.4	2.9
<u>Distributed Samizdat/Tamizdat?</u>		
Yes	3.1	2.1
No	4.2	2.8
<u>Took Part in Open Protest?</u>		
Yes	3.3	2.4
No	4.1	2.8
<u>Took Part in a Strike at Work?</u>		
Yes	3.7	2.4
No	4.1	2.8
<u>Listened to Foreign Radio?</u>		
Yes	4.0	2.7
No	5.0	3.3
<u>Tried to Avoid Military Service?</u>		
Yes	3.4	2.3
No	4.0	2.7

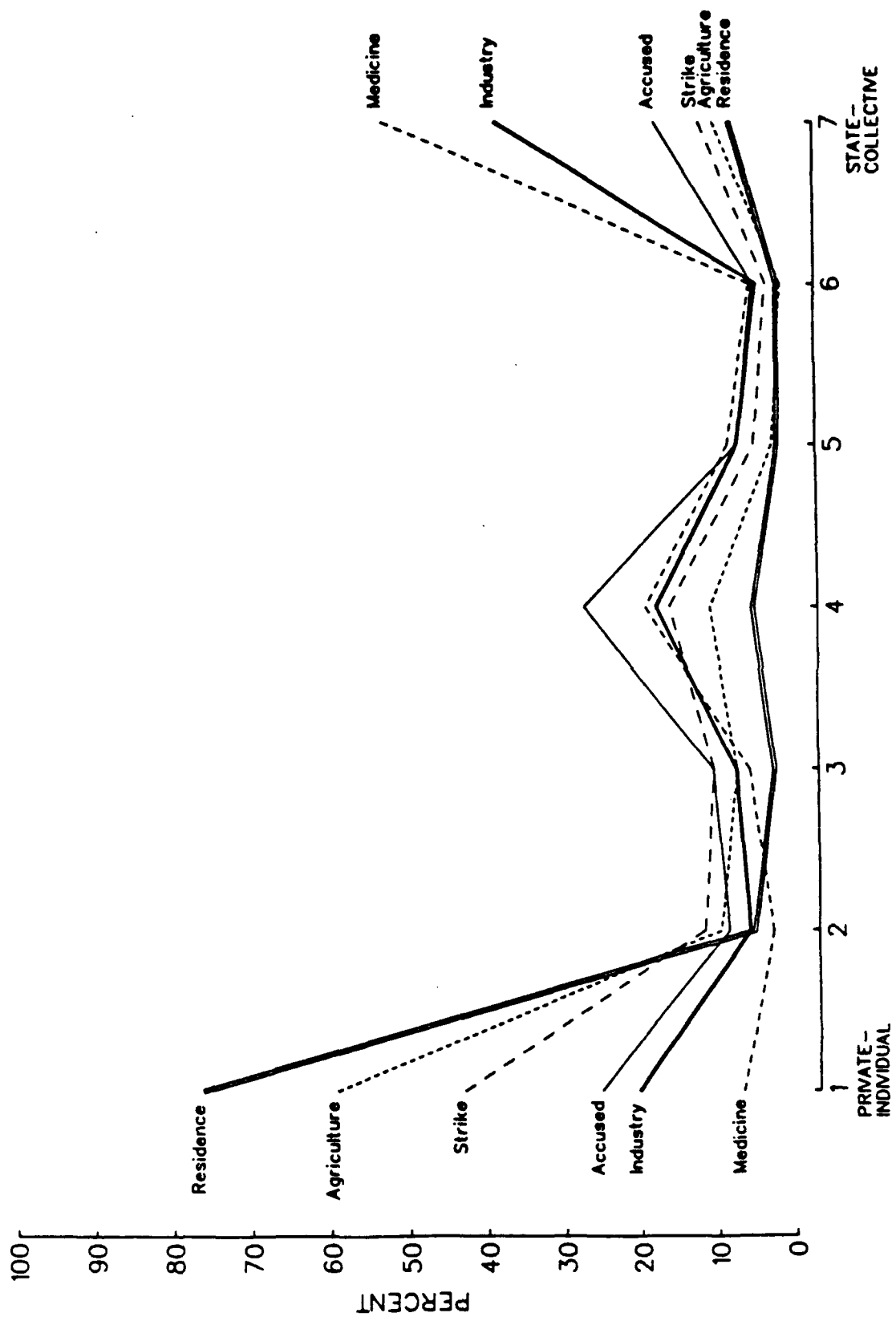


Figure 1: Percentage Distribution of Responses to Questions on Institutional Norms

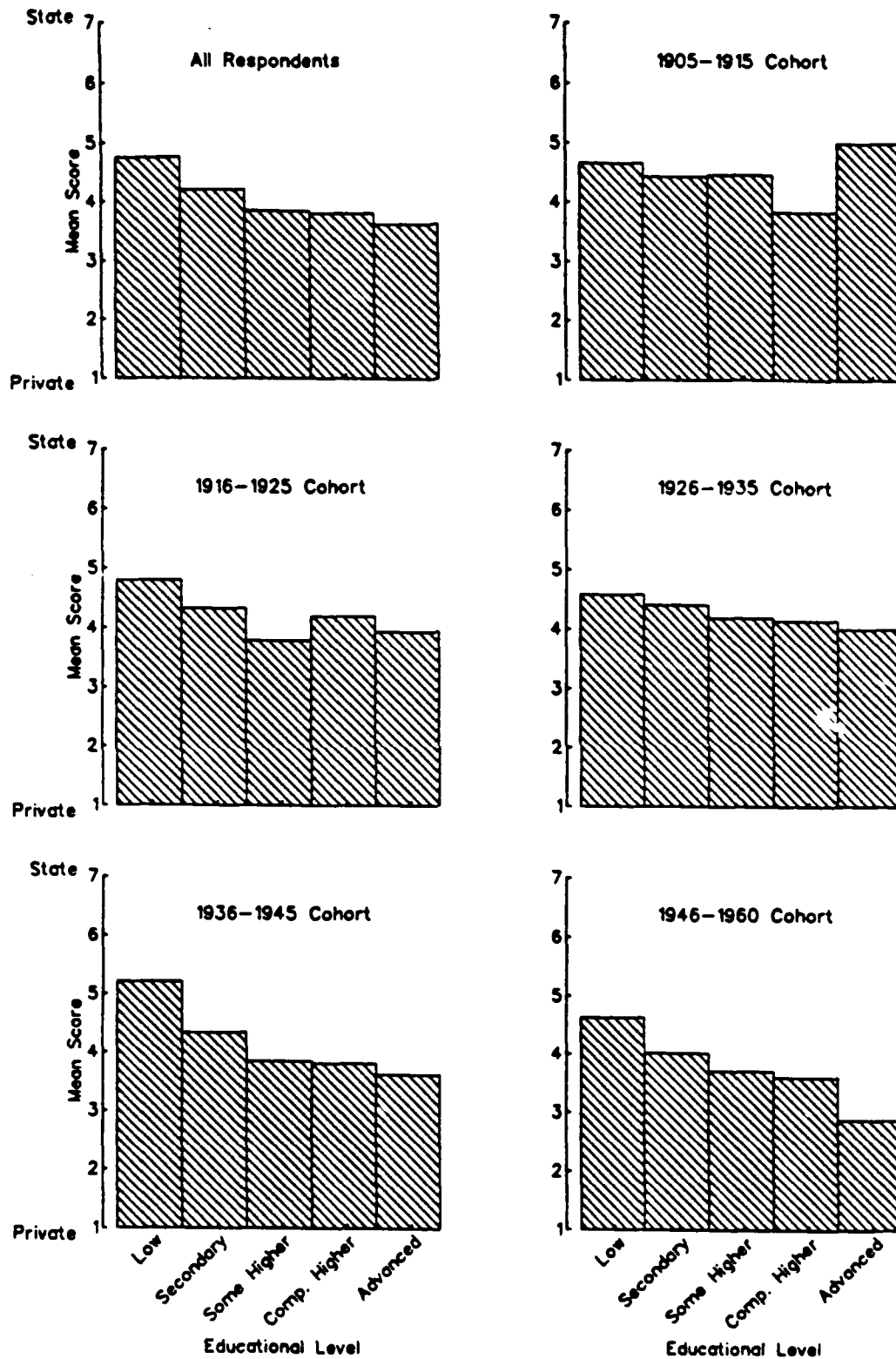


Figure 2. Mean Scores on State-Private Control, by Level of Education and Year of Birth

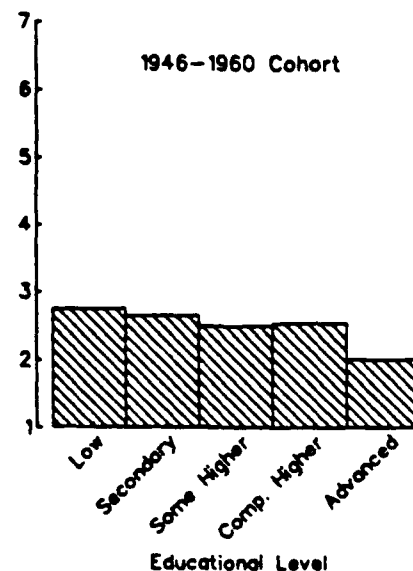
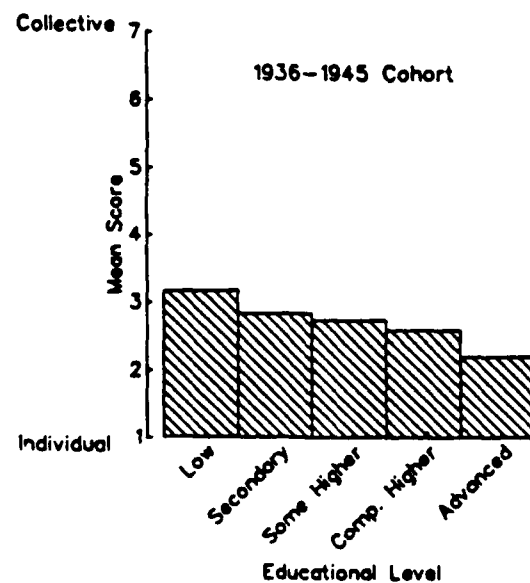
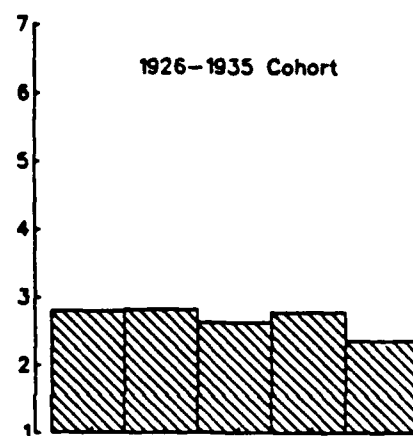
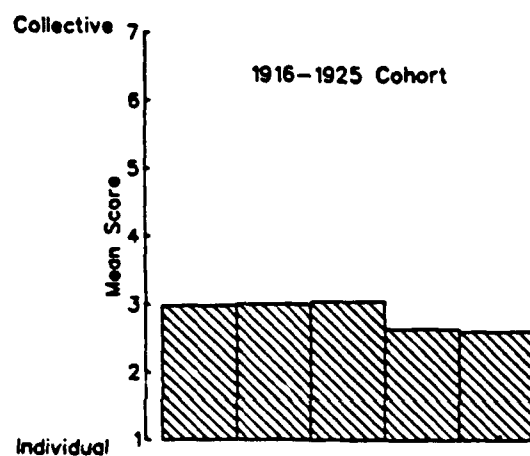
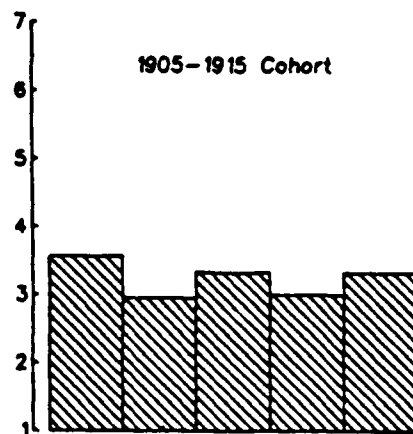
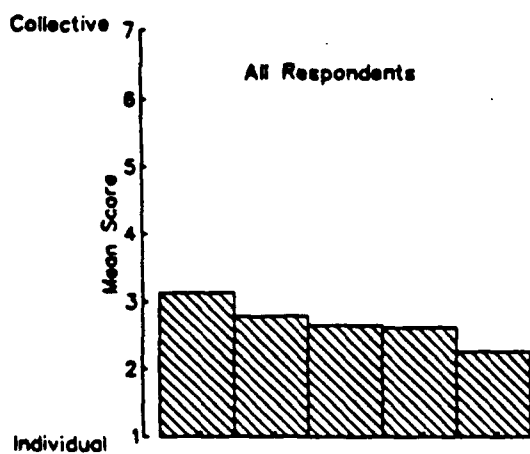
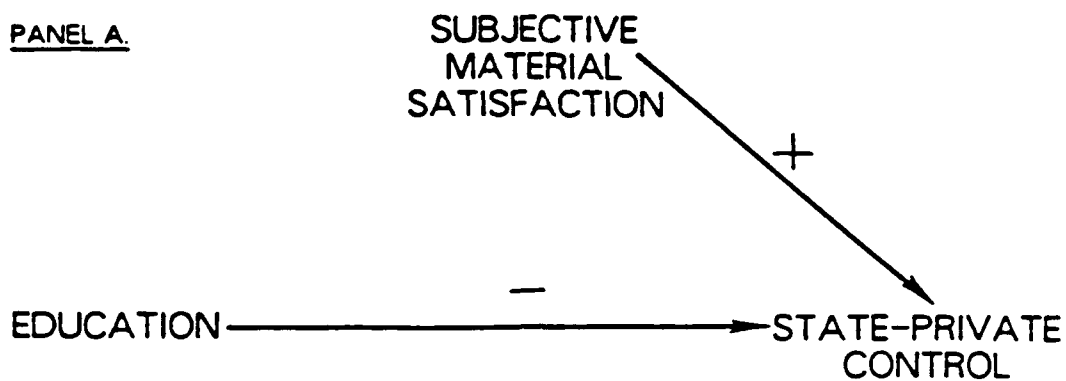


Figure 3. Mean Scores on Collective-Individual Rights, by Level of Education and Year of Birth

PANEL A.



PANEL B.

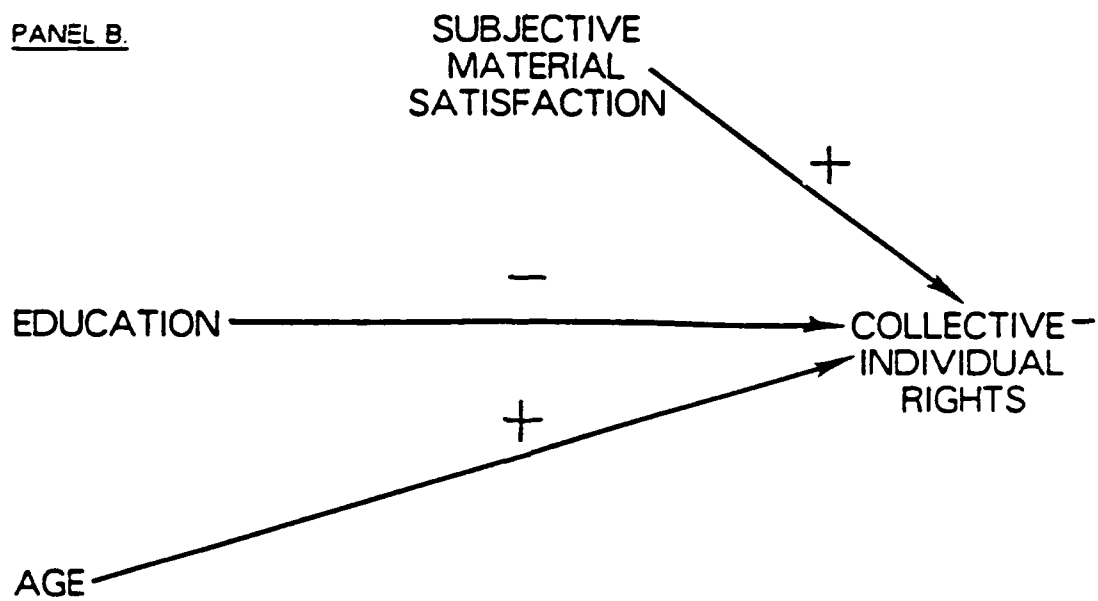


Figure 4. Schematic Diagram of Effects of Education, Subjective Material Satisfaction, and Age on Regime Support

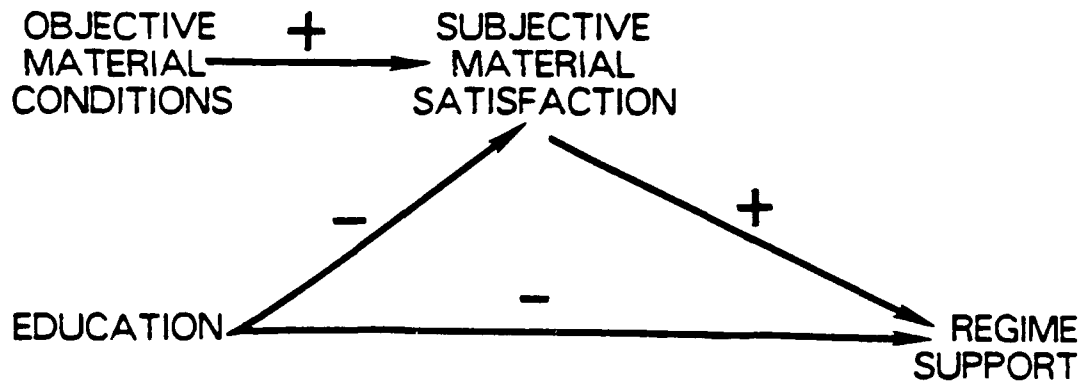


Figure 5. Schematic Diagram of Factors Affecting Regime Support

Chapter Five

The Attentive Public for Soviet Science and Technology

Linda Lubrano

The Attentive Public for
Soviet Science and Technology

With the recognition of scientific and technological change as central components of national and international policies, scholars, policymakers, and public opinion specialists in the United States have studied the views of the American public toward science and technology since the late 1950s.¹ There have not been any comparable studies of the Soviet public, despite the fact that science and technology play a prominent role in the official view of Soviet historical development. Soviet leaders have promoted the idea of a scientific-technical revolution and the importance of science as a key to the communist future. Yet, we do not know whether the regime's message has had the desired impact on citizen attitudes toward science, technology, and public policy. The Soviet Interview Project (SIP) has provided us with the first opportunity to see if there is an attentive public for Soviet science and technology, at least among a small but significant segment of the Soviet population.

American research on citizen attitudes in the United States demonstrates that different issues generate different levels of attentiveness on the part of the general public. People who are more educated tend to have a broader range of issue awareness, and they tend to be more attentive (than the less educated) to issues that are perceived as specialized or less directly relevant to one's daily life. The "attentive public" for science and technology, that is, the portion of the

population interested in, and knowledgeable about, science and technology issues, provides a potential base for informed support and criticism of regime policy.² In this chapter, we shall identify the attentive public for science and technology among recent Soviet emigrants, and we shall see whether attentiveness is a factor in determining attitudes toward Soviet science, scientists, and science policy.

At first glance, it might appear that the concept of an attentive public would be less salient in the Soviet Union than in the United States, since public opinion plays a smaller role in the formation of Kremlin policy. Upon closer study, however, we find that the concept is extremely useful in assessing how broad a base of support the Soviet government has for implementing policies that have already been adopted. No regime operates in a vacuum. The support and criticism of the attentive public, along with the indifference of the nonattentive public, can have a profound impact on the long-term effectiveness of national policies. This chapter study is a first step at identifying the extent to which the Soviet population may be attentive to the regime's high profile of science and technology, and the degree to which they may share the regime's proclaimed faith in science and technology to solve social problems.³

It is true, as with other studies from the SIP data, that the attentiveness and attitudes of the emigrant sample is not representative of the Soviet public as a whole. In the area of science and technology policy, moreover, we do not have Soviet surveys of public attitudes to serve as comparative reference

points. Nonetheless, I feel confident that cross-tabulations of the characteristics of the emigrant population are valid, and the results suggest relationships that may exist also in the USSR. In addition to limitations of the sample, this study is limited further by the fact that the questions used in the Soviet Interview Project are not the same as those used in studies of the American public. Because of this, we cannot measure attentiveness to science and technology in the same way, nor can we establish a direct correspondence between American and Soviet perceptions of science and technology issues. However, there will be some comparative commentary in the analysis wherever meaningful comparisons are possible.

Characteristics of the Attentive Public Among Soviet Emigrants

Studies of American citizens emphasize the importance of one's educational level in developing attentiveness to organized science.⁴ People who are more highly educated tend to be more attentive to science and technology than are those with less education.⁵ One would expect similar findings for Soviet citizens. Unless they can see its direct impact on their daily lives, most people perceive scientific and technical information as relatively abstract. Scientists and technicians, themselves, however, come into regular contact with the regime's science and technology policies and, presumably, are more attentive to them. In fact, people working in the science and technology sector may try to influence government policies through their institutions

of employment. One could hypothesize that as Soviet society becomes more dependent on high-level technology, the status of technical specialists will rise and the size of this potentially influential public may continue to expand.

Who has the best chance of receiving higher education and obtaining employment in scientific, technical, or other high status occupations in the USSR?⁶ The single most important factor, based on our analysis of the SIP data and corroborated by other studies,⁷ is the social-educational status of the respondent's parents. While family background is an important aspect of social stratification in most countries, it is particularly salient in the USSR where access to higher education often depends on family connections and place of residence. Children of the Soviet urban intelligentsia, for example, have a better chance of entering a major university than do children of the rural peasantry, not only because the quality of the pre-university education is better in the larger cities, but also because the Soviet urban intelligentsia is in many ways a self-replicating elite. Living in an urban environment is also important in the development of one's employment opportunities and in general exposure to scientific and technical information.⁸

Three other factors that may affect the attentiveness of the emigrant population to organized science are religion, age, and gender. Religious practice in the Soviet Union tends to be more prevalent among the peasantry, the less educated, and those living in rural areas. Religion is not necessarily incompatible with science, but American studies have found that those who are

less religious are more likely to be attentive to science and technology. This appears to be a characteristic that accompanies high educational attainment and urbanization and thus affects attentiveness to organized science indirectly. In the United States younger people and males are more interested in, and more knowledgeable about, science and technology. The impact of age is a consequence of rising levels of education for the adult population and the inclusion of recent scientific and technical information in school programs. The impact of gender is a result of differentiation in sex roles from early childhood development through adult life.⁹ We shall see if the same is true for the Soviet Union.

The following set of hypotheses summarizes the above discussion and the relationships I ^{expect to find} ~~shall test~~:

- o The higher the respondent's level of education, the more attention the respondent gave to science and technology in the USSR.
- o The more closely related the respondent's occupation was to the science sector, the more attention the respondent gave to science and technology in the USSR.
- o ^{were} The respondents who are male, younger, and/or less religious ^{were} are more likely to have been attentive to science and technology in the USSR than ^{were} are the respondents who are female, older, and/or more religious. [#]

Each hypothesis will be tested through cross-tabulations of background characteristics with answers to questions in the green supplement, which was administered to a random one-third of the SIP General Survey sample, and where the maximum number of respondents was 922.

Hypothesis 1

The higher the respondent's level of education, the more attention the respondent gave to science and technology in the USSR.

The attention people give to science and technology, and to other areas of public policy, can be observed in several ways. One method is to look at the respondents' reading habits. Another is to ask the respondents how closely they follow certain types of public issues. Both methods were used in the Soviet Interview Project. These differ from the measures of attentiveness developed by American scholars for surveys on science and technology. The three measures of attentiveness used in surveys of American citizens are: interest in science and technology, knowledge about science and technology, and the acquisition of information on science and technology issues.¹⁰ While there was no attempt to measure scientific or technical knowledge among Soviet emigrants, there are two variables in the Soviet Interview Project that can serve as partial indicators of interest and information acquisition, respectively, namely the reading of science fiction and the reading of scientific-technical nonfiction. I shall examine both aspects of the emigrants' reading habits as partial objective measures of attentiveness to science and technology. Then I shall discuss the subjective measure of attentiveness obtained from the respondents' own statements on how closely they followed Soviet scientific achievements.

Soviet emigrants were asked to identify the kinds of nonfiction books they had read during their last normal period in the USSR (LNP).¹¹ Almost 30 percent said they had read books on

science and technology.¹² This was the largest category of nonfiction responses except for books on foreign culture (read by 36.4 percent). Interest in foreign culture may have been linked to the respondents' decisions to emigrate, and they may have read scientific-technical nonfiction in anticipation of new jobs outside the USSR. Respondents were also asked what kinds of fiction they had read during their last normal period in the USSR. Almost 28 percent mentioned science fiction. This is lower than the percentage who had read classical literature, detective stories, and other types of fiction, but it is still a significant proportion. General interest in science fiction is widespread in the Soviet Union, particularly because it is a genre that allows for imaginative fantasies as well as for critical social commentary. If we use the reading of scientific literature (that is, science fiction and/or scientific-technical nonfiction) as an indicator of attentiveness, then 45.3 percent of the sample could be classified as members of the attentive public for Soviet science and technology.¹³

In testing hypothesis 1 I expected to find that the more highly educated respondents would be more likely to read scientific literature. This was true when the two types of literature were combined (see columns 1 and 4 in Table 3.1). I then separated respondents who read only science fiction from those who read only scientific-technical nonfiction. Whereas the latter remained correlated with higher levels of education, the former were distributed more evenly throughout the subsample. Compare, for example, the 19.2 percent of emigrants with 7-8

years of general education who had read science fiction to the 19.7 percent of those with some higher education who had read science fiction. This further substantiated the general popularity of science fiction, as distinct from the desire of the more educated emigrants to read ^{scientific} science-technical nonfiction in connection with their jobs. The emigrant's specialty in school was also highly significant in influencing reading preferences. Respondents who had studied medicine or the natural sciences, for example, were the most likely to read scientific-technical nonfiction, while engineering graduates were most likely to read science fiction.¹⁴

If the more educated members of the sample were most likely to read scientific literature, were they also most likely to follow Soviet scientific achievements? Are these the people whom we could identify as the "attentive public" for science and technology? Based on the subjective indicator of attentiveness, 32.8 percent of the emigrants (who answered the green supplement) was attentive, and approximately two-thirds was nonattentive. (For the full frequency distribution, see the column totals in Table 3.2.) When asked how closely they had followed Soviet scientific achievements and programs, those who had completed higher education were more likely to answer "very closely" or "fairly closely," while those with less than four years of school were more likely to answer "not at all." Hypothesis 1 is therefore true.

Education does not guarantee a high degree of attentiveness to organized science, however. A majority (53.4 percent)

of those who had completed higher education said either that they did not follow science very closely or that they did not follow science at all. In a rough comparison to the attentiveness of the American public, the SIP sample appeared to be more attentive to science and technology at all educational levels except the highest. Without similar measures of attentiveness, of course, an exact comparison cannot be made.¹⁵ Again, the respondent's educational specialty was just as important as the general level of education. Those who had studied the natural sciences claimed to have been more attentive to Soviet scientific achievements than did those who had studied other subjects.¹⁶

Hypothesis 2

The more closely related the respondent's occupation was to the science sector, the more attention the respondent gave to science and technology in the USSR.

I expected to find that the people who worked in scientific-technical occupations (that is, those who worked in the science sector of the economy and those who had scientific or engineering-technical occupations) would be the ones most likely to follow scientific events closely. The difficulty in testing this hypothesis is that most branches of the economy, broadly defined, are related in one way or another to science and technology. Also, initial occupational categories for the SIP general sample were defined so broadly that scientists were coded into the same professional category as artists and government planners. To get a finer distinction, I decided to focus on people with occupations in the science sector by identifying a group of respondents who met at least one of two criteria: (1)

employment in establishments conducting scientific research work, and (2) employment as scientific workers (including science teachers and administrators in institutions of higher education, vysshie uchebnye zavedeniia or vuzy). The number of respondents who met these criteria was 299, or 10.7 percent of the SIP general sample. One hundred of these were also in the sample that answered the green supplement.

Characteristics of Soviet emigrant scientists resembled those of the attentive general public in several ways. Most of the scientists came from families where the fathers were highly educated and in professional occupations. Their parents were usually not religious, and neither were they. Scientists were significantly more likely to live or work in an urban area than were nonscientists. A majority of the scientists were male, and most of them (72.9 percent) were between the ages of 33 and 52. When the reading habits of scientists were compared to nonscientists, I found, as expected, that the former were significantly more likely to read scientific-technical nonfiction. They were less likely, however, to read science fiction (see Table 3.3). Turning to the question of how closely the respondents claimed to follow Soviet scientific achievements, I found that scientists (especially those who were employed as scientific workers in vuzy) were significantly more attentive than were nonscientists, thus confirming hypothesis 2 (see Table 3.4).

The interpretation of these data varies depending on whether one focuses on the positive or the negative responses.

On the positive side, the SIP sample is more attentive to organized science than are American citizens. Focusing on the negative, one could ask why more than two-thirds of the respondents reportedly devoted so little attention to Soviet scientific achievements. Even among scientists, 43 percent said that they did not follow scientific achievements very closely or did not follow them at all. Do the negative responses to this question mean that there was little interest in science, or little interest in Soviet achievements and programs? Were Soviet scientific achievements seen as indications of scientific progress, per se, or as measures of Soviet prestige and power? The real import of this question can be understood only in comparison with questions on how closely the respondents followed other types of Soviet achievements and programs. Unfortunately, comparable questions were not included in the SIP survey.

As an alternative check on the validity of the subjective measure of attentiveness to organized science, I correlated emigrant responses to this question with their reading of scientific literature where the questions were more straightforward. More than 52 percent of those who followed Soviet scientific achievements very closely read science fiction, and almost 54 percent read scientific-technical nonfiction. By contrast, only 20 percent of those who did not follow Soviet scientific achievements at all read science fiction, and only 11 percent read scientific-technical nonfiction.¹⁷ Moreover, the two variables (reading scientific literature and being attentive to scientific achievements) behaved the same way in relation to

other variables. This reinforced my confidence in using the subjective measure of attentiveness to report the results for hypotheses four through nine.

Hypothesis 3

The respondents who are male, younger, and/or less religious ^{are} ~~are~~ more likely to have been attentive to science and technology in the USSR than ~~are~~ ^{were} the respondents who are female, older, and/or more religious.

Studies of the American public have shown that men are more attentive than women to science, technology, and other areas of public policy. One might argue that this is the result of the lower educational ^{achievements} of women and the low proportion of women in scientific and technical occupations. Indeed, my examination of the SIP data shows that women in the general sample were less likely than men to have completed higher education and to have worked in engineering/technical occupations. To test the impact of gender and age on attentiveness to science and technology, I used them as control variables in other hypotheses and I also correlated them directly with each of the variables discussed above. Women and older emigrants (especially those over 53 years old) were indeed less likely than men and younger emigrants to read science fiction or scientific-technical nonfiction or to follow Soviet scientific achievements closely, thereby partly confirming hypothesis 3.¹⁰ The gender variable had no significant impact on the direct correlations between the education ^{or} ~~and~~ occupation variables and the variables of attentiveness to organized science. Those correlations did not remain consistent for all age groups,

however. Relationships between the education and occupation variables, on the one hand, and attentiveness to science and technology, on the other, were significant only for the middle and older-aged groups (especially 43-57 and 63-72 years old). This suggests that age may be more important than gender as a factor affecting respondents' attentiveness to organized science.

The SIP data reveal, not surprisingly, that religiosity is associated with some of the other variables that result in low attention to science and technology. Indeed, among the emigrants interviewed, there was a greater probability that respondents would be religious if they were older, less educated, in low status occupations, and/or living in rural areas. By contrast, students of the natural sciences and respondents who had worked in the science sector (especially engineering-technical personnel) were among the least religious. Proportionately more women believed in God, and more men believed in science. But the nonreligious ^{including} (even scientists) were more apt to say they believed in humanity rather than in science, as an alternative to a belief in God.¹⁹ As in the United States, religious people were less attentive to science and technology than were the nonreligious, thus confirming the rest of hypothesis 3 (see Table 3.5). When controlled for other variables, however, religion appeared to be less significant than gender in affecting the respondent's attentiveness to organized science.

Thus far the study demonstrates that variables which ^{are} ~~were~~ salient for the development of attentiveness among American citizens ^{are} ~~were~~ important also for the SIP sample. I have not done

a multi-variate analysis of the SIP data to compare the relative importance of each variable in the formation of attentiveness. At this stage of analysis, however, it is clear that education, family background, urban living, occupation, age, gender, and religiosity each play a role in the identification of an attentive public for science and technology in both countries. Moreover, the relationship of each variable to attentiveness is similar in the American studies and the Soviet Interview Project. The more attentive are those who had higher education, those who worked in professional and technical occupations, and those who ^{are} were male, younger, and less religious. Having identified the characteristics of those who were most attentive to science and technology ^{in the USSR}, let us now examine the attentive public's attitudes toward science, scientists, and science policy.

Attitudes Toward Science and Technology

American scholarship on public attitudes toward science and technology suggests that the people who are more informed about and more interested in science are generally those who strongly support scientific programs and the traditional values of scientific research. This is also the case for those who work close to the science sector of the economy. Scientists tend to be more sympathetic toward the funding of projects that contribute directly to their own work and to the protection of values such as the freedom of scientific inquiry. An informed assessment of science and technology often extends to a broad

appreciation of the impact of science and technology on society as a whole. One might expect, therefore, that scientists and the attentive public would be highly confident in the capacity of science and technology to solve social problems. At the same time, however, we could argue that the closer one is to the scientific enterprise, the more one sees its shortcomings, its problems, and its pockets of corruption. The lofty image that scientists and scientific institutions project to the general public may seem tarnished to those who experience them directly.

In this section I test six hypotheses regarding the attitudes of SIP respondents toward science and technology, with attentiveness to organized science as the key independent variable. The maximum sample size for each hypothesis (based on responses to the green supplement) is 913.

Hypothesis 4

The more closely the respondent followed Soviet scientific achievements, the more likely the respondent was to support Soviet funding for exploration in outer space.

In 1957 the world acknowledged the launching of Sputnik as a major accomplishment for Soviet science and technology. By 1965 Soviet investment in science had increased dramatically and the commitment to the space program continued into the 1970s, albeit at a slower pace. Estimated expenditures for space exploration were approximately 1 to 2 percent of Soviet GNP from 1967 to 1980.²⁰ Using support for the space program in the 1970s as an indication of support for Soviet science and technology, SIP interviewers asked the respondents whether they thought the Soviet Union was spending too much, too little, or about the

right amount of money on space exploration, along with several other areas of public policy.²¹

General public support for Soviet space exploration was very low compared with support for other program areas.²² More than 67 percent of the respondents thought that the government was spending too much money on space. The only two areas where a greater percentage of respondents thought that the Soviet Union was spending too much money were defense (79.3 percent) and aid to Eastern Europe (72.9 percent). Indeed, emigrants may have viewed the space program as a component of Soviet military research and foreign policy. The preference for a reduction of expenditures on the space program was evident among all respondents regardless of how closely they followed Soviet scientific achievements. The difference between the attentive public and the nonattentive public is not statistically significant on this issue. Hypothesis 4 is therefore false (see Table 3.6).

Hypothesis 5

The more closely the respondent followed Soviet scientific achievements, the more likely the respondent was to believe that scientific leaders were honest.

Was the low public support for space exploration indicative of public distrust of scientists and scientific institutions? To test whether the public viewed scientific leaders as basically honest or dishonest, respondents were asked about scientists in the USSR Academy of Sciences. For comparative purposes they were also asked about the leaders of other institutions in the USSR. The Academy remains a highly

prestigious establishment, and this was clearly reflected in the emigrants' assessments. Almost 26 percent of all respondents in the general sample (N=2793) said that "most" or "almost all" Academy leaders were honest, a higher percentage than for the leaders of any institution other than the military, which was 27.3 percent. More than 33 percent said that "some" Academy leaders were honest, and only 13.6 percent said that "none" or "hardly any" were honest, a lower percentage than for the leaders of any other institution. Although a favorable view of the Academy was widespread, respondent perceptions of honesty in the Academy leadership were expressed more frequently by the attentive public than by the nonattentives, thus substantiating hypothesis 5 (see Table 3.7). As expected, scientists were more likely than nonscientists to view Academy leaders as honest. But they did not have as much confidence in the Academy's competency, as will be shown below.

Hypothesis 6

The more closely the respondent followed Soviet scientific achievements, the more likely the respondent was to believe that scientific leaders were competent.

~~The SIP sample was~~ ^{Soviet emigrants were} asked about the competency of Academy leaders in comparison with leaders of other institutions. Again, the public's view of the Academy was a very positive one. The proportion of respondents in the ^{general} ~~main~~ sample who said that Academy leaders were incompetent (2.4 percent) was smaller than for leaders of any other institution. The military and the Academy were chosen as "most" or "almost all" competent by the largest proportion of respondents, that is, by 50.2 percent and

by 49.2 percent respectively. Generally, the public viewed the leaders of all Soviet institutions as more competent than honest. Public perception of Academy competence did not seem to vary with one's attentiveness to scientific achievements, however, and hypothesis 6 was found to be false. Between 40.0 and 48.1 percent of the respondents said that "most" Academy leaders were competent. The rest were fairly evenly divided between the views that "some" or "almost all" Academy leaders were competent (see Table 3.8). Although in general agreement with the rest of the respondents, scientists tended to be more skeptical about the Academy's competency. Only 15.1 percent of the scientists thought that "almost all" Academy leaders were competent, compared with 23.4 percent of the nonscientists who thought so.

Hypothesis 7

The more closely the respondent followed Soviet scientific achievements, the more likely the respondent was to support the relative importance of fundamental over applied research.

Respondents were asked if during their last normal period in the USSR they thought it was more important for scientists to create new ideas and theories or to solve practical problems. The people who were most attentive to organized science said that fundamental research was more important. Almost 37 percent of them preferred the creation of new ideas, compared with 30 percent who preferred the solution of practical problems. All other respondents said that applied research was more important, by an increasingly greater margin for the less attentive. Among those who followed scientific achievements fairly closely, there was only a small difference in the proportion who preferred

applied over basic research (36.5 percent compared to 36.0 percent). Among those who did not follow scientific achievements very closely, there was a somewhat larger difference (40.7 percent compared to 37.7 percent); but for those who did not follow scientific achievements at all, the difference was almost 17 percent (51.5 percent compared to 34.6 percent) (see Table 3.9). Hypothesis 7 is obviously true.

A separate cross-tabulation reveals that scientists were the most likely to support both kinds of activities (36.1 percent of scientists, compared to 26.4 percent of the attentive public, and 18.2 percent of the nonattentive public). A similar decline in the relative support for both basic and applied research can be seen in Table 3.9 (from 32.3 percent ^{of} for the most attentive to 13.8 percent ^{of} for the nonattentive). Attentiveness and employment in the science sector, therefore, are important factors in providing public support for balanced government programs in basic and applied research.

Hypothesis 8

The more closely the respondent followed Soviet scientific achievements, the more likely the respondent was to value the freedom of scientific inquiry.

To see whether respondents supported freedom of scientific inquiry, they were asked to comment on the placement of restrictions on scientific research. Should scientists be permitted to study whatever they want (even if they sometimes discover things that might be harmful), or should there be restrictions on their research? Support for the principle of scientific freedom was widespread regardless of whether the

respondent was generally attentive or nonattentive to science (see Table 3.10). Support for the freedom of scientific research was even higher among emigrant scientists (75.0 percent of them were opposed to any restrictions on science, compared with 69.5 percent of the nonscientists who opposed restrictions), but this was not statistically significant. Hypothesis 8 appears to be false. However, the survey question may have elicited a response to two different issues--freedom of scientific research, on the one hand, and social risks from science, on the other. The full implications of this question will have to await further analysis.

Hypothesis 9

The more closely the respondent followed Soviet scientific achievements, the more likely the respondent was to believe that science and technology could solve problems in the areas of agriculture, health, consumer goods, energy, pollution, and crime.

More than 40 percent of the respondents said that the solution of practical problems was more important than theory-building. But did they have faith in science and technology to solve problems in areas of social and economic policy? To test hypothesis 9 the emigrants were asked whether they believed (during their last normal periods in the USSR) that Soviet science and technology could eventually solve most of the problems, some of the problems, or none of the problems in several policy areas. The results differed, of course, depending on the area of public policy. The interpretation of these differences is somewhat ambiguous. In some cases, differences may reflect the respondents' perceptions of the relative

distances between science and technology, on the one hand, and the substantive policy areas, on the other. Or, the differences may reflect the respondents' perceptions of how amenable each problem was to any kind of a solution. In other cases, respondents may have been expressing their confidence in the Soviet system, that is, in the ability of the Soviet political leadership to use science and technology in the solution of certain social problems. Therefore, we do not know whether the emigrants were focusing on the research potential of science and technology or on the Soviet system in general. With this in mind, let us review the results.

The people who followed Soviet scientific achievements closely were no more likely than the nonattentives to believe that science and technology could solve the problems in agriculture, health, energy, or crime. There was a statistically significant difference in the correlations for pollution and consumer goods,²³ but the distribution of responses did not clearly correspond to what was stated in the hypothesis. For most policy areas, therefore, hypothesis 9 appears to be false.

The policy areas where respondents expressed the most confidence were health, energy, and pollution. In each case, a majority said that science and technology could solve at least "some" of the problems. The most positive responses were in the area of energy, where 32.8 percent said that science and technology could solve "most" of the problems. At the other extreme, a majority of respondents said that science and technology could solve "none" of the problems in agriculture and

consumer goods (53.1 and 53.9 percent respectively) (see Table 3.11). The most plausible interpretation, at this stage of analysis, is that the emigrants' confidence in science and technology to solve problems depends not so much on their attentiveness to organized science as it does on the perceived distance of science and technology from the problem area. Health, energy, and pollution are closely related to science and technology, whereas crime, agriculture, and consumer goods are usually viewed by the public as areas that are primarily social and economic.

For a better delineation of responses, I created a new variable that separated scientists from other emigrants in their responses to the question on attention to Soviet scientific achievements. Since people who worked in the science sector of the economy or in science occupations were among the most attentive members of the sample, I put them in the top category of attentiveness and combined the four response categories to two for the nonscientists as follows:

<u>Scientist/Attentive Public Variable</u>	<u>N</u>
1. Scientists (respondents who worked in the science sector or in science occupations)	100
2. Attentive Public (nonscientists who followed scientific achievements very closely or fairly closely)	243
3. Nonattentive Public (nonscientists who followed scientific achievements not too closely or not at all)	570
Total number of respondents who answered the question on attentiveness to science	913

I then correlated this variable with emigrant responses on the

ability of science and technology to solve social and economic problems.

It is significant that scientists were consistently more negative than nonscientists in their responses. In all six areas of public policy, scientists were the most likely to say that "none" of the problems could be solved by science and technology. By contrast, attentive nonscientists were the most optimistic (see Table 3.12). One possible explanation is that attentive nonscientists were people who supported organized science, but they did not know as much about the country's scientific and technical capabilities as the scientists did.

Conclusion

What conclusions can be drawn about the attentive public for Soviet science and technology? Approximately 33 to 45 percent of the SIP respondents (who answered the green supplement) could be considered members of the attentive public, as measured by attention to Soviet scientific achievements or by reading habits, respectively. Many read science fiction and acquired information on organized science by reading scientific-technical nonfiction. Those who were attentive to science and technology had a more positive image of the honesty of scientific leaders, and they were more likely to support the relative importance of fundamental research. The concept of attentiveness was significant in drawing these distinctions, but it was not very helpful in differentiating respondent attitudes in areas where there was a high degree of consensus.

On the whole, SIP respondents had a positive view of

science and scientific leaders. There was widespread support for the freedom of scientific inquiry and a prevailing consensus that scientists were competent in their work. Confidence in the enterprise of science and in the professional behavior of scientists apparently did not extend to the Soviet system in general. The different assessments of organized science in contributing to each area of social and economic policy reflected a discriminating, but somewhat negative view of the system's ability to utilize its scientific and technical capabilities effectively.

Where there was confidence that Soviet organized science could solve some of the problems, for example in the area of health, there was criticism that the Soviet government was not investing enough resources to do so. In other areas, such as agriculture, respondents were pessimistic about the application of scientific and technical achievements, possibly also because of inadequate government investments.²⁴ This would be all the more frustrating for those who considered the main task of science to be the solution of practical problems. The pragmatic orientation toward science and technology, especially among nonscientists, might account for the low priority of the space program. Respondents may have seen the exploration of outer space as frivolous or as a military venture not directly relevant to the daily needs of the average citizen.

Perhaps the most revealing aspect of our study is the negative attitude of Soviet emigrant scientists toward Soviet scientific and technical capabilities. It is true that they were

significantly more attentive to organized science than were nonscientists. Fifty-seven percent of the scientists followed scientific achievements ^{closely} and 71.5 percent read scientific literature. But there is another side to these statistics. Forty-three percent of the scientists admitted that they had not been reading scientific-technical nonfiction and that they had not followed scientific achievements closely. This might explain their view that scientists were not as competent as the public believed. Also, scientists may have had higher expectations for the scientific community than did the rest of the public. Their ~~disaffection~~ ^{dissatisfaction} with the quality of Soviet science and technology may have been tied very closely to their disaffection with the Soviet Union and the decision to emigrate.

The attentive public identified in this study was once part of a larger attentive public toward science and technology in the USSR. Although we have no comparable statistics on the proportion of the Soviet population that follows scientific achievements closely, we would probably find that the characteristics of the Soviet attentive public would be similar to the characteristics discussed here. Both on a theoretical and an empirical level, one could argue that education, occupation, age, gender, and religiosity are important factors in the development of attentiveness to organized science in the USSR. Clearly it is problematic to speculate about the Soviet attentive public sharing the attitudes of the emigrant attentives toward science, scientists, and science policy. Similarly, one could question whether Soviet scientists would agree with the

scientists who emigrated in their assessments of Soviet scientific and technical capabilities. Nonetheless the above data suggest issues that could be explored in further research on Soviet science and society.

Firstly, it appears that regime messages about the importance and high quality of science and technology are being received favorably, at least among educated and urban elements of the Soviet population. The regime has been highly successful in promoting positive images of organized science even among those who are generally not very attentive to science and technology. However, the government's advocacy of a strong system of science has also raised citizen awareness of scientists' needs and capabilities. In some ways public support for the principles of science appears to be stronger than its support for government policies. Negative perceptions of Soviet scientific and technical capabilities probably mean, therefore, that there is low confidence in the Soviet system rather than in science, per se.

Secondly, the regime has fostered expectations that science and technology must be utilized in the solution of social and economic problems. The criterion of success in Soviet science, at least since the days of Stalin, has been praktika, namely the practical implementation of the results of scientific research. The strong sense of utilitarianism, where performance is valued above rhetoric, contributes further to the erosion of public confidence in regime policies, both among attentives and nonattentives. In the area of science and technology, therefore,

it appears that the Soviet regime may be a victim of its own campaign to promote the high prestige and practical consequences of organized science.

Finally, the above findings on the attentive public for Soviet science and technology will acquire greater theoretical significance if they are related to future analyses of attentiveness in other policy areas. In the present study, the concept of attentiveness did not provide a high degree of differentiation in responses to questions on Soviet science policy. Is this consensus of public views unique to science and technology, or is there consensus between attentives and nonattentives in other areas as well? At the same time, ~~however,~~ the above data reveal ~~other kinds of~~ ^a differentiation in emigrant assessments of science and science policy. ^{which may be extended to other policy areas.} Do Soviet citizens generally make a ^{for example,} distinction between their support for professional elites and their skepticism about the contribution of those elites to the solution of social problems? Does this reflect a serious discrepancy between the high prestige of institutions and low public confidence in system performance? Such questions remind us that the issue of attentiveness to science and technology is not an isolated one, but is part of a broad range of issues that characterize the citizen's relationship to public policy.

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Acknowledgments

The author expresses her thanks to Robert Pearson, Janet Schwartz, and Susan Gross Solomon for their comments on an earlier draft and to Jim Porter, Jim Roberts, and Carol Zeiss for their technical assistance. The preparation of this paper was made possible by a Faculty Summer Research Grant from The American University. The author also acknowledges the support of the Hoover Institution at Stanford University, where she was a National Fellow in 1981-82.

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NOTES

1. For a review of these studies, see Georgine Pion and Mark Lipsey, "Public Attitudes Toward Science and Technology: What Have the Surveys Told Us?" Public Opinion Quarterly, 45 (1981):303-316.
2. The concept of the attentive public for science and technology is adapted from Gabriel Almond's model of policymaking in The American People and Foreign Policy (New York: Harcourt, Brace, & Co., 1950) as developed by Jon Miller, Robert Suchner, and Alan Voelker in Citizenship in an Age of Science (New York: Pergamon Press, 1980).
3. In their studies of the American public, scholars make a distinction between science and technology. See, for example, T. R. LaPorte, "Indicators of Public Attitudes Toward Science and Technology," Scientometrics, 2 (1980):439-448. Different results for each are reported in Jon Miller, et al., Citizenship, pp. 93-98, 125-133, and passim. This distinction was not made in the Soviet Interview Project.
4. The concept of "organized science" as used by Miller et al. refers to the institutional practice of both science and technology. That is the way the term will be used in this paper.
5. See, for example, Jon Miller, Kenneth Frewitt, and Robert Pearson, The Attitudes of the U.S. Public Toward Science and Technology (Chicago: National Opinion Research Center/University of Chicago, 1980), pp. 28-34 and 50-53.

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6. My analysis of high status occupations includes people who were coded as leaders, managers, military, high-level engineering technicians, and other professionals. See Linda Lubrano, "SIP Working Paper on the Attentive Public for Soviet Science and Technology," pp. 12-15.
7. See Richard Dobson, "Education and Opportunity," in Contemporary Soviet Society, ed. Jerry Pankhurst and Michael Paul Sacks (New York: Praeger Publishers, 1980), pp. 115-137; Murray Yanowitch, Social and Economic Inequality in the Soviet Union (New York: M. E. Sharpe, Inc., 1977), pp. 58-133.
8. Almost one-half (48.9 percent) of the emigrants who were interviewed in the SIP came from very large cities (in cities with populations of more than one million people). See Lubrano, "SIP Working Paper," pp. 15-16.
9. For the impact of religion, age, and gender on attentiveness to organized science in the United States, see Miller, et al., Citizenship, pp. 185-189 and Miller, et al., Attitudes, pp. 47-59. One variable from the American studies that I have not included in the analysis is the respondents' political activity, which accounted for 6 percent of the variance in attentiveness to organized science in the United States. Ibid., p. 51.
10. Jon Miller and others observed "interest" by asking respondents which of 32 headlines they might read about. They observed "knowledge" by asking respondents to answer substantive questions about science and technology. And,

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- they observed "acquisition of information" by asking respondents about their reading habits, including the reading of science magazines. Miller, et al., Citizenship, pp. 73-118; Miller, et al., Attitudes. pp. 17-45.
11. The "last normal period" is defined as the five-year period usually preceding the emigrant's application for an exit visa. That is the reference point for SIF questions on Soviet science and technology.
 12. The number of people reading scientific-technical nonfiction may have been higher if technical journals, newspapers, and documents had been included in the response options.
 13. The range in the size of the attentive public in the United States is from 4 percent of the population to 55 percent depending on the level of education (Miller, et al., Attitudes, p. v). Almost 45 percent of the emigrants in the Soviet Interview Project are highly educated, which probably helps to account for the relatively large size of the attentive public in this study.
 14. The chi-squares are statistically significant at the 0.00015 level for the correlation between education and science fiction, at the 0.00005 level for the correlations between education/education specialty and scientific-technical nonfiction, and at the 0.0213 level between education specialty and science fiction.
 15. Among those who had less than a secondary school education in the USSR or less than a high school education in the USA, 16.4 percent or 4.0 percent, respectively, are attentive to

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organized science. Among those who completed Soviet secondary school or American high school, the difference is 25.5 percent to 12.0 percent, respectively. Among those with some higher education in the USSR or some college in the USA, the difference is 34.7 percent to 28.0 percent, respectively. But among those who completed higher education or had advanced graduate training in each country, the proportion of attentives is 46.6 percent for the Soviet Union and 47.9 percent for the United States. (American figures adapted from Miller, et al., Attitudes, p. 46.)

16. The distribution of responses for respondents who had studied the natural sciences was: Very closely, 32.3 percent; fairly closely, 32.3 percent; not too closely, 22.6 percent; not at all, 12.9 percent. $N=31$, with the chi-square statistically significant at the 0.00005 level.
17. In the correlation between reading scientific literature and following scientific achievements, the chi-square is statistically significant at the 0.00005 level.
18. For the correlations of gender and age with reading scientific literature and following scientific achievements the chi-squares are statistically significant from level 0.0024 to level 0.0005.
19. Thirty percent of the scientists said they believed in a suprahuman power, 30.7 percent said they believed in humanity, 13.1 percent said they believed in science, and 9 percent said they believed in God.
20. From 1955 to 1965 the Soviet science budget grew more than

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fivefold. For an estimate of space expenditures, see U.S., Congress, Senate, Soviet Space Programs: 1976-80, Part 1, 97th Cong., 2d sess., 1982, pp. 334-335, and earlier reports for 1966-70 and 1971-75.

21. The other areas were health, defense, agriculture, foreign aid (to Eastern Europe), crime, and education.
22. Public support for exploration in outer space has also been very low in the United States. See Miller, et al., Attitudes, pp. 84-96.
23. Chi-squares for the correlations between attentiveness and pollution/consumer goods are statistically significant at the 0.0018 level and 0.0745 level, respectively.
24. Almost two-thirds of the emigrants said that the Soviet government was spending too little on health and agriculture.

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References

Dobson, Richard 1980. "Education and Opportunity," Contemporary Soviet Society, ed. Jerry Pankhurst and Michael Paul Sacks. New York: Praeger Publishers.

La Porte, T. R. 1980. "Indicators of Public Attitudes Toward Science and Technology," Scientometrics, 2:439-448.

Miller, Jon, Prewitt, Kenneth, and Pearson, Robert 1980. The Attitudes of the U.S. Public Toward Science and Technology. Chicago: National Opinion Research Center/University of Chicago.

Miller, Jon, Suchner, Robert, and Voelker, Alan 1980. Citizenship in an Age of Science. New York: Pergamon Press.

Pion, Georgine, and Lipsey, Mark 1981. "Public Attitudes Toward Science and Technology: What Have the Surveys Told Us?" Public Opinion Quarterly, 45:303-316.

Yanowitch, Murray 1977. Social and Economic Inequality in the Soviet Union. New York: M.E. Sharpe, Inc.

TABLE 3.1
RESPONDENT'S EDUCATION AND READING SCIENTIFIC LITERATURE^a

Education	Reading Scientific Literature				ROW
	Neither	Only	Only	Both	TOTAL
	Scifi/ST	Scific	SciTech	Scifi&ST	
Less than 4 yrs.	9 ^b				9
gen'l. educ.	100.0 ^c				1.0 ^e
	1.8 ^d				

From 4-6 yrs.	35	2	1		38
gen'l. educ.	92.1	5.3	2.6		4.2
	7.0	1.4	.6		

Either 7-8 yrs.	39	10	3		52
gen'l. educ. or	75.0	19.2	5.8		5.7
1 yr. trade sch.	7.8	7.2	1.9		

More than 8 yrs.	15	2	1	1	19
gen'l. educ. or	78.9	10.5	5.3	5.3	2.1
1 yr. spec. sec.	3.0	1.4	.6	.9	

Either 2 yr. trade	3	1		1	5
sch. w. diplom cr	60.0	20.0		20.0	.6
3 yrs. wo. diplom	.6	.7		.9	

Sec. sch. diplom w/	112	31	11	10	164
wo. 2 yrs. trade/	68.3	18.9	6.7	6.1	18.1
1 yr. spec. sec.	22.5	22.5	7.0	8.6	

Complete special'd.	129	29	32	25	215
secondary sch.	60.0	13.5	14.9	11.6	23.7
	26.0	21.0	20.4	21.6	

Higher education	31	14	15	11	71
without degree	43.7	19.7	21.1	15.5	7.8
	6.2	10.1	9.6	9.5	

Complete higher ed.	124	49	94	68	335
or grad. study	37.0	14.6	28.1	20.3	36.9
	24.9	35.5	59.9	58.6	

COLUMN TOTAL	497	138	157	116	908 ^g
	54.7 ^g	15.2	17.3	12.8	100.0

CHI-SQUARE=136.12359

D.F.=24

SIGNIFICANCE = 0.0000

^aGiven the distribution of the sample along the marginals (see row and column totals), the reader should look at the relative proportion of each row total that falls in each column. For example, compare the 37.0 percent of the people with a complete higher education who read neither and 20.3 percent who read both to the 78.9 percent of the people with one year of secondary school who read neither and 5.3 percent who read both. (This

applies to other tables as well.)

^bN (number of respondents with less than four years of general education who read neither science fiction nor scientific-technical nonfiction)

^cRow Percent (percentage of the total number of respondents in that row who read neither science fiction nor scientific-technical nonfiction)

^dColumn Percent (percentage of the total number of respondents in that column with less than four years of general education)

^eThe Row Total (9) is 1.0 percent of Total N (908).

^fThe Column Total (497) is 54.7 percent of Total N (908).

^gTotal N (number of people who responded to questions about reading scientific literature)

TABLE 3.2

RESPONDENT'S EDUCATION AND FOLLOWING SCIENTIFIC ACHIEVEMENTS

Education	Following Scientific Achievements				ROW TOTAL
	Very	Fairly	Not Too	Not At	
	Closely	Closely	Closely	All	
Less than 4 yrs.			1 ^a	7	8
gen'l. educ.			12.5 ^b	87.5	.9 ^d
			.2 ^c	3.3	
From 4-6 yrs.	1	3	11	24	39
gen'l. educ.	2.6	7.7	28.2	61.5	4.3
	1.5	1.3	2.7	11.3	
Either 7-8 yrs.	5	4	16	25	50
gen'l. educ. or	10.0	8.0	32.0	50.0	5.5
1 yr. trade sch.	7.5	1.7	4.0	11.8	
More than 8 yrs.	1	4	5	9	19
gen'l. educ. or	5.3	21.1	26.3	47.4	2.1
1 yr. spec. sec.	1.5	1.7	1.2	4.2	
Either 2 yr. trade	1	1	1	3	6
sch. w. diplom or	16.7	16.7	16.7	50.0	.7
3 yrs. wo. diplom	1.5	.4	.2	1.4	
Sec. sch. diplom w/	12	31	67	55	165
wo. 2 yrs. trade/	7.3	18.8	40.6	33.3	18.1
1 yr. spec. sec.	17.9	13.3	16.7	25.9	

Complete special'd.	7	47	118	43	215
secondary sch.	3.3	21.9	54.9	20.0	23.5
	10.4	20.2	29.4	20.3	

Higher education	5	20	36	11	72
without degree	6.9	27.8	50.0	15.3	7.9
	7.5	8.6	9.0	5.2	

Complete higher ed.	35	123	146	35	339
or grad. study	10.3	36.3	43.1	10.3	37.1
	52.2	52.8	36.4	16.5	

COLUMN TOTAL	67	233	401	212	913 ^f
	7.3 ^e	25.5	43.9	23.2	100.0

CHI-SQUARE=155.30746

D.F.=24

SIGNIFICANCE = 0.0

^aN (number of respondents with less than four years of general education who did not follow scientific achievements too closely)

^bRow Percent (percentage of the total number of respondents in that row who did not follow scientific achievements too closely)

^cColumn Percent (percentage of the total number of respondents in that column with less than four years of general education)

^dThe Row Total (8) is 0.9 percent of Total N (915).

^eThe Column Total (67) is 7.3 percent of Total N (915).

^fTotal N (number of people who responded to questions about following scientific achievements)

TABLE 3.3
SCIENTISTS AND READING SCIENTIFIC LITERATURE

Occupation	Reading Scientific Literature				ROW
	Neither	Only	Only	Both	TOTAL
	Scifi/ST	Scific	SciTech	Scifi&ST	
Scientists	28 ^a	14	33	23	98
	28.6 ^b	14.3	33.7	23.5	10.8 ^d
	5.6 ^c	10.1	21.0	19.8	
Nonscientists	469	124	124	93	810
	57.9	15.3	15.3	11.5	89.2
	94.4	89.9	79.0	80.2	
COLUMN TOTAL	497	138	157	116	908 ^e
	54.7 ^c	15.2	17.3	12.8	100.0

CHI-SQUARE=40.68636

D.F.=3

SIGNIFICANCE = 0.0000

^a N (number of scientists who read neither science fiction nor scientific-technical nonfiction)

^b Row Percent (percentage of the total number of respondents in that row who read neither science fiction nor scientific-technical nonfiction)

^c Column Percent (percentage of the total number of respondents in that column who were scientists)

^dThe Row Total (98) is 10.8 percent of Total N (908).

^eThe Column Total (497) is 54.7 percent of Total N (908).

^fTotal N (number of people who responded to questions about reading scientific literature)

TABLE 3.4
SCIENTISTS AND FOLLOWING SCIENTIFIC ACHIEVEMENTS

Occupation	Following Scientific Achievements				ROW
	Very Closely	Fairly Closely	Not Too Closely	Not At All	TOTAL
Scientists	20 ^a	37	30	13	100
	20.0 ^b	37.0	30.0	13.0	11.0 ^d
	29.9 ^c	15.9	7.5	6.1	
Nonscientists	47	196	371	199	813
	5.8	24.1	45.6	24.5	89.0
	70.1	84.1	92.5	93.9	
COLUMN TOTAL	67	233	401	212	913 ^f
	7.3 ^e	25.5	43.9	23.2	100.0

CHI-SQUARE=40.33880

D.F.=3

SIGNIFICANCE = 0.0000

^aN (number of scientists who followed scientific achievements very closely)

^bRow Percent (percentage of the total number of respondents in that row who followed scientific achievements very closely)

^cColumn Percent (percentage of the total number of respondents in that column who were scientists)

^dThe Row Total (100) is 11.0 percent of Total N (913).

²The Column Total (67) is 7.3 percent of Total N (913).

¹Total N (number of people who responded to questions about following scientific achievements)

TABLE 3.5
RESPONDENT'S RELIGIOSITY AND FOLLOWING SCIENTIFIC ACHIEVEMENTS

Religiosity	Following Scientific Achievements		ROW TOTAL
	Very Closely or Fairly Closely	Not Too Closely or Not At All	
Religious	69 ^a	184	253
	27.3 ^b	72.7	27.9 ^d
	23.1 ^c	30.3	
Not religious	230	423	653
	35.2	64.8	72.1
	76.9	69.7	
COLUMN TOTAL	299	607	906 ^e
	33.0 ^c	67.0	100.0

CHI-SQUARE=5.21148

D.F.=1

SIGNIFICANCE = 0.0224

^aN (number of respondents who were religious and who followed scientific achievements very closely or fairly closely)

^bRow Percent (percentage of the total number of respondents in that row who followed scientific achievements very closely or fairly closely)

^cColumn Percent (percentage of the total number of respondents in that column who were religious)

^dThe Row Total (253) is 27.9 percent of Total N (906).

^eThe Column Total (299) is 33.0 percent of Total N (906).

^fTotal N (number of people who responded to questions about religiosity and following scientific achievements)

TABLE 3.6
ATTENTIVENESS AND SUPPORT FOR THE SPACE PROGRAM

Following Scientific Achievements	Amount Spent on Space Program			ROW
	Right	Too	Too	TOTAL
	Amount	Little	Much	
Very closely	13 ^a	3	47	63
	20.6 ^b	4.8	74.6	7.7 ^d
	7.6 ^c	21.4	7.5	
Fairly closely	47	5	169	221
	21.3	2.3	76.5	27.2
	27.3	35.7	27.0	
Not too closely	84	5	279	368
	22.8	1.4	75.8	45.3
	48.8	35.7	44.5	
Not at all	28	1	132	161
	17.4	.6	82.0	19.8
	16.3	7.1	21.1	
COLUMN TOTAL	172	14	627	813 ^f
	21.2 ^a	1.7	77.1	100.0
CHI-SQUARE=7.38364 D.F.=6 SIGNIFICANCE = 0.2868				

^aN (number of respondents who followed scientific achievements very closely and said that the right amount was being spent on the space program)

^bRow Percent (percentage of the total number of respondents in that row who said that the right amount was being spent on the space program)

^cColumn Percent (percentage of the total number of respondents in that column who followed scientific achievements very closely)

^dThe Row Total (63) is 7.7 percent of Total N (813).

^eThe Column Total (172) is 21.2 percent of Total N (813).

^fTotal N (number of people who responded to questions about following scientific achievements and support for the space program)

TABLE 3.7

ATTENTIVENESS AND THE HONESTY OF SCIENTIFIC LEADERS

Following Scientific Achievements	How Many Scientific Leaders Are Honest					ROW TOTAL
	None	Hardly Any	Some	Most	Almost All	
Very closely	5 ^a	5	28	9	4	51
	9.8 ^b	9.8	54.9	17.6	7.8	7.6 ^d
	7.9 ^c	8.9	8.3	5.9	6.1	
Fairly closely	9	17	99	49	15	189
	4.8	9.0	52.4	25.9	7.9	28.1
	14.3	30.4	29.5	32.2	22.7	
Not too closely	31	27	162	72	22	314
	9.9	8.6	51.6	22.9	7.0	46.7
	49.2	48.2	48.2	47.4	33.3	
Not at all	18	7	47	22	25	119
	15.1	5.9	39.5	18.5	21.0	17.7
	28.6	12.5	14.0	14.5	37.9	
COLUMN TOTAL	63	56	336	152	66	673 ^f
	9.4 ^e	8.3	49.9	22.6	9.8	100.0

CHI-SQUARE=33.95751

D.F.=12

SIGNIFICANCE = 0.0007

^aN (number of respondents who followed scientific achievements very closely and said that none of the scientific leaders were honest)

^bRow Percent (percentage of the total number of respondents in that row who said that none of the scientific leaders were honest)

^cColumn Percent (percentage of the total number of respondents in that column who followed scientific achievements very closely)

^dThe Row Total (51) is 7.6 percent of Total N (673).

^eThe Column Total (63) is 9.4 percent of Total N (673).

^fTotal N (number of people who responded to questions about following scientific achievements and the honesty of scientific leaders)

TABLE 3.8
ATTENTIVENESS AND THE COMPETENCY OF SCIENTIFIC LEADERS

Following Scientific Achievements	How Many Scientific Leaders Are Competent					ROW TOTAL
	None	Hardly Any	Some	Most	Almost All	
Very closely			16 ^a	25	11	52
			30.8 ^b	48.1	21.2	77.7 ^d
			8.0 ^c	8.0	7.5	
Fairly closely	2	1	59	90	41	193
	1.0	.5	30.6	46.6	21.2	28.6
	18.2	16.7	29.4	28.9	27.9	
Not too closely	5	4	91	148	63	311
	1.6	1.3	29.3	47.6	20.3	46.0
	45.5	66.7	45.3	47.6	42.9	
Not at all	4	1	35	48	32	120
	3.3	.8	29.2	40.0	26.7	17.8
	36.4	16.7	17.4	15.4	21.8	
COLUMN TOTAL	11	6	201	311	147	676 ^f
	1.6 ^e	.9	29.7	46.0	21.7	100.0

CHI-SQUARE=7.68627

D.F.=12

SIGNIFICANCE = 0.8091

^aN (number of respondents who followed scientific achievements very closely and said that some scientific leaders were competent)

^bRow Percent (percentage of the total number of respondents in that row who said that some scientific leaders were competent)

^cColumn Percent (percentage of the total number of respondents in that column who followed scientific achievements very closely)

^dThe Row Total (52) is 7.7 percent of Total N (676).

^eThe Column Total (11) is 1.6 percent of Total N (676).

^fTotal N (number of people who responded to questions about following scientific achievements and the competency of scientific leaders)

TABLE 3.9

ATTENTIVENESS AND SUPPORT FOR FUNDAMENTAL RESEARCH

Following Scientific Achievements	What Scientists Should Do			ROW TOTAL
	Create	Solve	Both	
	Ideas	Problems		
Very closely	24 ^a	20	21	65
	36.9 ^b	30.8	32.3	8.4 ^d
	8.4 ^c	6.3	11.8	
Fairly closely	80	81	61	222
	36.0	36.5	27.5	28.5
	28.1	25.7	34.3	
Not too closely	136	147	78	361
	37.7	40.7	21.6	46.4
	47.7	46.7	43.8	
Not at all	45	67	18	130
	34.6	51.5	13.8	16.7
	15.8	21.3	10.1	
COLUMN TOTAL	285	315	178	778 ^e
	36.6 ^e	40.5	22.9	100.0
CHI-SQUARE=16.06310 D.F.=6 SIGNIFICANCE = 0.0134				

^aN (number of respondents who followed scientific achievements very closely and said that scientists should create new ideas)

^bRow Percent (percentage of the total number of respondents in that row who said that scientists should create new ideas)

^cColumn Percent (percentage of the total number of respondents in that column who followed scientific achievements very closely)

^dThe Row Total (65) is 8.4 percent of Total N (778).

^eThe Column Total (285) is 36.6 percent of Total N (778).

^fTotal N (number of people who responded to questions about following scientific achievements and support for fundamental research)

TABLE 3.10

ATTENTIVENESS AND THE FREEDOM OF SCIENTIFIC RESEARCH

Following Scientific Achievements	Should Research Be		
	Free or Restricted		BOW
	Free	Restrict	TOTAL
Very closely	47 ^a	18	65
	72.3 ^b	27.7	8.1 ^d
	8.4 ^c	7.5	
Fairly closely	150	67	217
	69.1	30.9	27.1
	26.7	28.0	
Not too closely	266	100	366
	72.7	27.3	45.8
	47.4	41.8	
Not at all	98	54	152
	64.5	35.5	19.0
	17.5	22.6	
COLUMN TOTAL	561	239	800 ^f
	70.1 ^e	29.9	100.0

CHI-SQUARE=3.70703 D.P.=3 SIGNIFICANCE = 0.2949

^bN (number of respondents who followed scientific achievements very closely and said that scientific research should be free)

^tRow Percent (percentage of the total number of respondents in that row who said that scientific research should be free)

^cColumn Percent (percentage of the total number of respondents in that column who followed scientific achievements very closely)

^dThe Row Total (65) is 8.1 percent of Total N (800).

^eThe Column Total (561) is 70.1 percent of Total N (800).

^fTotal N (number of people who responded to questions about following scientific achievements and freedom of scientific research)

TABLE 3.11
PUBLIC CONFIDENCE IN SCIENCE AND TECHNOLOGY

Area of Public Policy	Science and Technology Can Solve Most/Some/None of the Problems ^a			
	Most	Some	None	N
Agriculture	9.1	37.9	53.1	795
Health	18.5	67.2	14.4	807
Consumer goods	8.4	37.6	53.9	805
Energy	32.8	60.6	6.7	720
Pollution	17.5	52.7	29.8	766
Crime	14.0	48.6	37.4	771

^aPercentage of all respondents (N) who answered
in each policy area. Each row totals 100 percent.

TABLE 3.12
INABILITY OF SCIENCE AND TECHNOLOGY TO SOLVE PROBLEMS

Area of Public Policy	Scientists ^a	Nonscientists ^a		Level of Significance ^b
		Attentive	Nonattentive	
Agriculture	64.9	49.8	52.2	0.0637
Health	17.7	10.8	15.4	0.0044
Consumer goods	70.8	50.4	52.2	0.0028
Energy	8.8	5.1	7.0	0.2494
Pollution	40.6	27.3	28.7	0.0640
Crime	46.7	37.7	35.4	0.0922

^aPercentage of each group who said that science and technology could solve "none" of the problems in that policy area.

^bThe levels at which the chi-squares are statistically significant in cross-tabulations of responses from scientists and nonscientists.

WORK: ECONOMIC/DEMOGRAPHIC TRENDS

Chapter Six

Inequality of Earnings, Household Income and Wealth
in the Soviet Union in the 70's

Aaron Vinokur and Gur Ofer

ACKNOWLEDGEMENT

Analysis based on the Soviet Interview Project data was done with the unrestricted help, attention and excellent hard work of Pamela J. Hohn, Mary A. Cummings and Chong-Ook Rhee. Matilda Frankel provided very useful editorial advice. We would like to warmly acknowledge their assistance. The present version of this paper benefited from many useful comments offered by Janet G. Chapman, Abram Bergson, Joseph Berliner and Gertrude Schroeder.

Introduction

At least in the popular mind, socialism is associated with economic equality. The issue of whether or not incomes in the Soviet Union and the other members of the 'socialist' bloc are distributed in a more equal fashion than in the mixed economies of the West has, therefore, been addressed by students in both the East and West.

The scarcity of relevant data published in the Soviet Union adds to the many natural and methodological problems that any attempt at international comparison of equality must face. Raw data are completely unavailable to Western scholars, and whatever is published in Soviet scientific work is usually restricted to a very few measures of dispersion, mostly the decile ratio, and both the methodology and information about the nature of the samples that have been studied are at best obscure. As it is quite clear that Soviet authorities possess that necessary information, withholding it from the public eye must be attributed to the embarrassment that publication would cause. The source of such embarrassment is not entirely clear. Peter Wiles suggests that the main problem is that income in the Soviet Union is distributed less equally than in other East European countries (1974, pp. 1-2), but one cannot exclude internal considerations or embarrassment on the basis of international, East-West comparisons.

Given the problems of data and the ideological sensitivity of the issue, it is no wonder that views on Soviet income inequality are open to dispute. Soviet scholars almost in one voice claim that both wage and income distributions in the Soviet Union are much more equal than in the 'capitalist' world and that historical wage and income gaps in the Soviet Union are diminishing as Soviet society becomes more homogeneous in all aspects of social life. Soviet studies demonstrating a rather marked decline in the size distribution of wages since 1947 are better documented

and more convincing than those related to household incomes. As wages constitute the lion's share of incomes in the Soviet Union, however, it is reasonable to assume that incomes followed the same trend (Yanovitch, 1963). As regards inequality trends for the 70's, and even the 60's, there seems to be some dispute even among Soviet scholars. According to the well-informed Soviet economist V.F. Maier (writing in 1977), for example, "analysis of data that relate to the last 15-20 years shows that differentiation of incomes has not changed. And this conclusion is relevant not only for the total population, but also for the two main social groups, especially for kolkhozniks" (1977, p. 51). In 1979, however, the comparably well-informed Soviet scholars, L.A. Migranova and N.E. Rabkina, published a different conclusion. They claimed that income inequality measured by decile ratios and relating to per capita income for the entire Soviet population did decline over the "last 15-20 years; from 4.4 to 3.3" (1979, p. 106).

With respect to the more central question of comparison with the West, there are some Western scholars who support the Soviet claim of higher equality. J. Cromwell concluded in a recent paper that, in comparative perspective, "socialism as carried out in Eastern Europe has resulted in a true 'income revolution'" (1977, p. 305). If we accept the estimates presented by Alastair McAuley's very careful study (1979), which was based on Soviet data, we must reach a similar conclusion, though somewhat less enthusiastically phrased. An extreme formulation of just the opposite conclusion is C. Morrison's: "Czechoslovakia excepted, Eastern European countries do not have a more egalitarian income distribution. Admittedly, Czechoslovakia is the most egalitarian of all countries, but all the other East European countries belong in the same range of income distribution as the most advanced of the Western countries" (1984, pp. 126-127). Abram

Bergson came to the same conclusion regarding the size distribution of wages: "What emerges is a rather striking similarity in inequality between...the USSR and Western countries. Inequality in the USSR fluctuates in the course of time, but only rarely does any particular percentile ratio fall outside the range delineated by corresponding measures for Western countries" (1984, p. 1065). On the comparison of income distribution, however, Bergson is a little more cautious in asserting similarities (ibid., pp. 1072-73). The careful studies by Peter Wiles and J. Morkowski (1971), Wiles (1974), F. Pryor (1975) and J. Chapman (1977, 1979, 1983), all based on Soviet data, reach conclusions not far from Bergson's.

The opportunity to study questions of economic life in the Soviet Union independently was opened with the wave of immigration from the Soviet Union, beginning the late 60's. The first full-fledged family budget survey (ISIP) was conducted in the West with a sample of 1,250 families which emigrated from the Soviet Union to Israel during the mid-1970's. In this survey, respondents reported retrospectively on their lives in the Soviet Union during the last "normal" year there; this is the last year before their lives started to be affected by the decision to emigrate. For most families this turned out to be 1972, 1973, or 1974 in about equal proportions. Therefore, 1973 was considered as the reference year for most comparisons with Soviet data.

The second independent source of information is the Soviet Interview Project (SIP). In this project, 2,793 individuals who emigrated from the Soviet Union to the United States during the late 1970's and the early 1980's were interviewed. In this survey respondents also reported retrospectively on their lives in the Soviet Union during the last "normal" period.

Many similarities and differences exist between the ISIP and SIP projects. The Israeli project dealt only with economics of Soviet urban households and was, therefore, properly termed a family budget survey. The U.S. research project, on the other hand, is interdisciplinary, and questions related to the family budget comprise only a small part of the total questionnaire. From the outset of SIP, however, the intention has been to compare the results of the two surveys. Consequently, basic questions about personal wages and household income were included in the SIP questionnaire where possible exactly in the form of the ISIP survey.

The surveys have similar problems. All respondents in the Israeli sample and the vast majority in the SIP sample are Jews who came to the West from various urban areas of the Soviet Union. The socio-economic and demographic structures of both samples are, therefore, different from the comparable structures of the Soviet urban population. Both original samples have similar ethnic, immigrational and structural biases. As is discussed elsewhere in this volume, it is impossible to eliminate the first two biases. They can only be minimized. Structural bias can, however, be overcome by reconstructing the original sample to match the referent population.

With all these considerations in mind, the main goals of this paper are: first, to describe the empirical base of the SIP General Survey; second, to analyze the degree of inequality of personal wages, household income and wealth in the Soviet Union in 1979, as revealed by SIP; third, to compare the principal results of the ISIP and SIP surveys. The comparison is badly needed for many reasons. One of them is to check the "credibility" of both designs as valid and important sources of information on Soviet inequality. The second reason is to trace changes in wage,

income and wealth inequality that have occurred in the Soviet Union during the last decade.

The fourth goal is to compare the results of the two surveys with patterns of wage, income and wealth inequality that are typical for Western countries. With the help of this comparison, a third Soviet claim may be tested, namely, that wage, household income and wealth in Soviet "socialist" society are more equally distributed than in Western "capitalist" countries, and that the gap between the two socio-economic systems is so wide that it is possible in comparative perspective to define what has happened in the Soviet Union as an "income revolution."

The methodology developed by ISIP has been used systematically in calculations and comparative analyses of the "raw" data of both surveys. Some changes were introduced specifically to deal with the SIP sample.

The results presented in this paper are preliminary and cannot be taken as final. Subsequent analysis may change some of our conclusions.

Inequality of Wages

Methodology

For the majority of adult Soviet citizens, work in the public sector is the main source of personal wages and family income. For this reason, the employment status of respondents and their spouses at the end of the last normal period of their lives in the Soviet Union must be determined, and labor-force participation by sex, age, and marital status must be calculated.

Of the 2,793 respondents in the SIP sample, 2,045 (1,027 men and 1,018 women) were employed and received wages in the public sector. This sample is not representative of the employed urban population of the Soviet Union in the late 1970's, for there are discrepancies between the original sample

and the referent population (active population of large and medium sized cities of the Soviet Union). The main differences stem from the educational and occupational structures of the two populations. To match the referent population, the original sample was weighted or reconstructed. In weighting the original sample, only two dimensions were used: the sex and educational structures of the total active urban population of the Soviet Union in 1979 according to the last Soviet census. We assume that the educational structure of this population is very close to the relevant active population living in the Soviet Union in large and medium sized cities. The final result is a reconstructed sample of 2,045 respondents which closely approximates the referent population along these two dimensions. All results presented in this paper concerning the size distribution of wages are based on the weighted sample (see Appendix I for additional explanation).

Respondents who worked in the end of the LNP were asked to report their gross and net wages at their main place of work in the public sector, and at any additional place of work in the public sector. In addition, respondents were asked to report their net income (or wage) from any private work. The responses to these three questions were used to define the following concepts of wages (including salaries):

1. Gross wage at the main place of work in the public sector;
2. Gross wage at the second place of work in the public sector;
3. Income from private jobs;
4. Gross public wage (1 + 2 above);
5. Total wage (1 + 2 + 3 above).

Several measures of inequality of wages were used: coefficient of variation and the Gini coefficient, ratios between earnings at specific percentiles of the distribution (percentile ratios), and distributions of

respondents by wage categories and wage deciles. Dispersion measures were chosen to facilitate comparisons with studies on the Soviet Union and on other countries.

Findings: Inequality of wages in the Soviet Union

Table 1 presents findings on wage dispersion in the Soviet Union for three wage concepts: categories 1,4, and 5 above. Only 5.3 percent of all employed respondents reported an additional job in the public sector, and, on the average, such jobs added less than 4 rubles to the average gross wage. For these reasons the impact of extra public work on the distribution of wages is marginal. The discussion will, therefore, concentrate on wages at main place of employment only.

The impact of private wages on both wage levels and distribution is more substantial however. Of all workers, 263 (12.9 percent) reported on private wages. When averaged for all workers, private wages are estimated at 21.2 rubles per month. Tables 2 and 3 present selected findings on the incidence of private work by sex and occupation and on hourly rates of pay. We shall return to these findings when the distributive impact of private wages is analyzed.

When only public wages are considered (Table 1), it is found that the wage gap between the top and bottom two percentiles (P_{98}/P_2) is 5.75 (6.0 for all public wages); it narrows to 4.29 between the corresponding five percentile points (P_{95}/P_5) and becomes 3.33 for the decile ratio (P_{90}/P_{10}). The overall level of inequality as measured by the Gini coefficient stands at 0.244 for wages at main place of work. Only 6.2 percent of all earners make less than 70 rubles per month, and a similar segment of the employed make more than 275 rubles.

Who, in the Soviet Union, belongs to the group of lowest paid workers.

and who belongs to the highest paid group? According to the SIP results, women comprise more than 80% of the lowest decile of wage earners, and men 80% of the highest decile. In the lowest decile, more than 30 percent are blue-collar workers in the service sectors, 25 percent are employees in positions that require special secondary education (technicians, nurses and midwives, accountants, etc.), and more than 10 percent are non-professional white-collar workers. This lowest decile includes a relatively small number of workers with high education.

By contrast, more than 60 percent of the highest paid decile occupy positions that require higher education. It is interesting and important to point out that in the highest paid decile, more than 20 percent are blue-collar workers in the production sectors.¹ This reflects the preferential treatment of certain highly skilled blue collar workers in the Soviet Union, what may be called a 'labor aristocracy'.²

When we move to total wages (Table 1 column 3), we find much wider differentials. The Gini coefficient moves from 0.249 to 0.304 and the decile ratio from 3.33 to 3.75. In general, the impact of an additional element on the overall distribution of total wages depends on the relative importance of the segment, on the level of inequality of the distribution of the specific elements among all employed and on the correlation between the two distributions (of the particular element and the rest). A full analysis of the impact of private wages will be forthcoming, but Tables 2 and 3 imply that private wages are distributed in an extremely unequal fashion. Only 13 percent engage in private work at all and in some cases hourly private wages are very high (see Table 3). The evidence is mixed as to the correlation between wages from public and private sources. There are rather high rates of participation in private work by groups with relatively low public wages. It may well be that there is even a negative

correlation between the two, and private wages may reduce inequality by compensating individuals or groups with low public wages or low participation rates.

Comparison With Other Studies

Thanks to the contribution of Soviet researchers N.E. Rabkina and N.M. Rimashevskaja (1972; 1978), the careful analysis and compilations by Chapman (1977) and McAuley (1979), and the pioneering Western work on Soviet wages by Bergson (1944), we have a detailed picture of the trends in the distribution of wages in the Soviet Union from 1924 to 1970. For the years 1968, 1972 and 1976, Rabkina and Rimashevskaja compiled and published decile ratios only (1978, p. 20). Two other Soviet researchers, A. Aleksandrova and E. Federovskaja, published decile ratios for 1981 (1984, p. 21). As for Western studies, we have at our disposal only estimates based on ISIP for circa 1973 and SIP for around 1979.

Table 4 compares measures of dispersion of wages in 1968, based on Chapman (1977), and in 1973 and 1979 based on ISIP and SIP. The SIP and ISIP numbers refer to wages received from main place of work in the public sector. We assume this is also so for Chapman's estimates for 1968, which are based on her interpretation of official Soviet data that were presented in the bizarre and obscure fashion of non-calibrated histograms. Given the span of 11 years, when average wages rose by more than half (see above), and the fact that the three estimates are entirely independent of each other, the similarity of results must be considered amazing. Although other possibilities exist, our inclination, which cannot be considered entirely unbiased, is to conclude: (1) that the individual SIP and ISIP estimates are quite reliable, and (2) that there were relatively small changes in the distribution of wages in the Soviet Union over the decade of

the 70's. The same conclusion seems to be borne out also by Soviet decile ratio estimates (see Table 4). According to these data, published by different scholars, the decile ratio rose from 2.83 in 1968 to 3.4 during the mid 70's, and returned to 3.0 by 1981. Such a cycle seems to be consistent with the various wage reforms that took place during the period. With the raising of the minimum wage to 60 rubles in 1968, Soviet wage distribution attained the highest level of equality thus far. A natural widening of gaps following the reform, and the gradual introduction of the next reform, including another increase of the minimum wage to R70, could have created the cycle of the 70's (McAuley, 1979).

The last two columns of Table 4 present information on the distribution of total wages as estimated by ISIP and SIP. Both show higher levels of inequality than that of public wages, but again the results are remarkably similar.

As was pointed out by Bergson, "measures of inequality of wages for different countries are apt to be less than fully comparable statistically" (1984, p. 1066). Nevertheless, many Western scholars still attempt to do this kind of comparison. The data in Table 5 present some measures of the inequality of wages for five Western countries and the Soviet Union.³ Inequality of 'public' earnings in the Soviet Union, measured by decile ratio, is much lower than in Japan (in 1968), the U.S. (in 1975), and France (in 1972). These results indicate that perhaps the gap between the highest and lowest wage groups, measured by P_{95}/P_5 and P_{98}/P_2 ratios, is also wider in the U.S., Japan and France than in the Soviet Union. Currently, however, we have these ratios only for the USSR.

On the other hand, the Soviet ratios are similar or even higher than those for the U.K. and the observation for France in 1977. When the distributions of total Soviet wages, including private wages, are

considered, Soviet decile ratios clearly fall well within those for the market economies presented. It may, however, be claimed that such a comparison is unfair since there may also be side earnings in market economies that are not captured by the data presented. Finally, it must be pointed out that the comparisons presented in the table are for pretax wages. Given the very low income tax rates in the Soviet Union and its relative proportionality, as compared with higher and more progressive rates in most other countries, it is reasonable to assume that a post income tax comparison would turn out even less impressive for the Soviet Union.⁴

So much for the comparisons themselves, but a word must also be said about the countries upon which they were based. It is reasonable to assume that the degree of equality of wage distribution rises with the level of economic development. The main reason for this, it is hypothesized, is the spread of modern education into all parts of the society as it develops, resulting in a decline of quasi-rents for scarce skills. If this hypothesis is reasonable, then the Soviet Union must be given credit for achieving a higher degree of wage equality at a lower level of development than the other countries in the comparison presented above. One major explanation for this achievement is no doubt the early and dynamic development of the Soviet education system at all levels and the opening of access to it to everybody, especially to women. The resulting rapid increase in the supply of skilled workers for the industrialization drive allowed the Soviet Union to reduce wage differentials drastically ever since the late 50's.

The Level, Structure and Size Distribution of Household Income

Methodology

Soviet statisticians refer to "family" (sem'ia) rather than to household. "Family is understood to be a group of individuals not necessarily related by blood or marriage who share a common budget" (McAuley 1979, p. 15). This definition of household was used by both ISIP and SIP. In ISIP, the basic unit of analysis is the household. In the framework of this unit any member age 17 or older was asked to report on any source of personal or family income. In SIP, however, the basic unit of analysis is the individual, not the family or household. The individual respondent could be any member of a household, not necessarily its head. SIP respondents were asked a more limited number of questions concerning income than were ISIP respondents. Defining total family income and its major components has, therefore, posed certain problems.

Total income can be estimated by the declared total and by summing up the reported components. As the latter includes only the respondent's gross wages from all sources and the spouse's gross wage in the main place of work, the declared total family income should by definition be equal to or greater than the sum of reported components. Due to problems of recollection and some ambiguity as to the relevant period, this is not so in all cases*. The decision was to assume that recollection of components, most related to the respondent himself, is more reliable, so whenever the sum of components was higher than the declared family income, the former were used instead.⁵

The restricted number of questions on income restrict also the investigation on equality to fewer income concepts and components than in ISIP. At the one end of the spectrum we can study household income derived only from public sector wages. Here we lack only spouse's wages from a

second job in the public sector and any public wages received by a third earner in the household. Both are relatively rare and therefore the distortion is minimized. At the other end we can study the distribution of total money income, including in addition to all the above elements of private income, wages of others, and all money contributions out of the Social Consumption Fund (SCF), mostly pensions, and also other allowances. Unfortunately we cannot study separately the distributional effect of all private wages and private income, or that of the SCF payments, for we believe that the two elements have opposite distributional effects.

A second major methodological problem is to define and restructure a representative sample for the Soviet referent population. This involves two steps. The first one is to exclude from the original SIP sample of 2,793 respondents two groups: a group of some 400 spouses who were also respondents in the sample. In this way each family appears only once. Second, we must exclude all households represented by a respondent who was neither the head of the household nor the spouse. For such households there is no information on wages of head and spouse nor on the employment status and occupation of the head, all of which are essential for the present analysis. These two exclusions leave a SIP subsample of 1995 households that must be reweighted in order to resemble the referent Soviet urban population.

Reweightings were done according to two criteria, the demographic-economic character of households and the educational level of heads of households. According to the first criterion all households were classified first by their working status into active and non-active. If any member of the family was employed in the public sector, the household was considered active. Second, households were classified according to type: complete families, incomplete families and singles, and by sex of

head. Complete, active families were classified also by work status of the husband and wife. Weighting according to this criterion was done according to data of the 1970 census (as for ISIP) with few marginal changes to take account of whatever data are available from the 1979 census.

Each type of household was subsequently reconstructed according to the educational structure of the active urban population of the Soviet Union. The reconstruction was done on the basis of the last Soviet census. When the head of the household was male, the educational structure of the working male population as provided in the 1979 census was used. If the head of the household was female, their educational structure was used. The resulting reconstructed, or weighted and inflated, original subsample is not ideal, but it is a very close approximation of the referent population (along the two dimensions noted above).

The final reweighted sample includes 1,995 households of which 221, or 11 percent, are non-active.

Findings: Income Inequality in the Soviet Union

According to the results based on the SIP reweighted subsample, the average money gross monthly income per household in 1979 was 338.6 rubles for the total population, and 357.7 rubles for the active population. Comparison of these figures with the equivalent Soviet values is problematic for many reasons. First of all, data on average household income of the total population or the total urban population have not been published in the Soviet Union. Data on the average family income of state workers and employees are published by the official Soviet Central Statistical Administration, but in the following form. The total average income per employed person, which includes only two sources--the average gross wage and the total income from the social consumption fund is

multiplied by the suggested average number of employed persons in the family (or household). The Statistical Administration published four figures for 1979: 1. Total average income per worker or employee--224 rubles per month; 2. Average gross wage per employed person--163 rubles; 3. Average value of total income from social services per employed person--61 rubles; and 4. Total income per family--400 rubles per month (NK SSSR, 1980, p. 393). By simple division of the first number into the last, it is possible to arrive at the average number of persons employed per family.

The concept of total household (or family) income used in the Soviet Union includes "free" social services but does not include private income from private work (except income from private plots). The concept of gross money income, by definition, does not include "free" social services, but does include private income from private work. To compare the results of the SIP survey with Soviet data, the following procedure has been followed:

1. The value of "free" social services (58.4 rubles per month or 14.6 percent of total income) was excluded from the average total income calculated in the Soviet Union for families of workers or employees.⁶

2. Private income from private work was excluded from the average "actual" gross monthly income based on the reweighted SIP subsample. Because SIP respondents were asked to report only their income from private work and not their spouses' also, the average actual private income of complete active households was doubled. This assumes that the relevant characteristics of the group of respondents and their spouses is approximately the same.

The final results of all the considerations mentioned above are presented in Table 6. It was necessary to include in this table averages for two different populations--complete and incomplete families because the definition of family (or household) used by the Soviets in their

calculation is not clear. Complete families include families where both husband and wife are present. Incomplete families are one-parent families. Unrelated persons were excluded from the calculations presented in Table 6. The data presented in this table reveal similarities between the Soviet and SIP data for both types of families. This similarity has to be taken very cautiously due to the relatively "crude" character of the comparison.

Findings on the size distribution of income are presented for two populations, active households (Table 7) and the entire population (Table 8). All the estimates are for the distribution of income per-household member over all households. We consider this distribution to be more meaningful than that of the distribution of the same income over all people, mainly because the household as a unit earns all incomes. (See Ofer & Vinokur, 1980, and Kuznets, 1981).

The main link between the distribution of incomes and the distribution of wages is through the distribution of earnings from the public sector to the active population. In both cases it is the same total wage fund that is distributed once among workers and, through them, among their families. Starting from inequality of wages, the level of inequality per household member depends on the distribution of workers among the families, on the correlation between wages of workers in the same family, and on the distribution of family size. The two distributions will come close to each other when these additional factors behave in a uniform way or cancel each other out. If, for example, each active household 'gets' two workers with correlated wages and household size is also uniform, the inequality of income will not be much greater than that of wages.⁷

As it turns out, when inequality is measured by the Gini coefficient, dispersion of public sector wages increases from 0.249 to 0.324 when we

move from workers to their households, which is a significant difference but not extreme. Corresponding estimates by ISIP are 0.275 and 0.293. Given the problems in estimating income in SIP mentioned above, there is reason to believe that the Gini coefficient of 0.324 is biased upward and that the effect of moving from workers to households is nearer the ISIP estimate of 0.293. The reason for this is that SIP household income received from the public sector does not include wages of a third or higher order worker or second job earnings of anyone other than the respondent. This omission is only relevant mostly for large families located in many cases at the lower end of the income (per household member) scale. Further support that this is so is provided by the very high and unreasonable decile ratio for public earnings per household members - 5.0, as compared with the corresponding figure of just 3.33 for public earnings per worker.⁸

As we move from public earnings to total money income (still for the active population), we add, in addition to the omitted element of public earnings just mentioned, all private incomes and all money payments from SCF. We expect the first element to raise the level of inequality and the second to reduce it. As the latter is not very large for the active population, however, the combined impact is to raise the Gini coefficient from 0.324 to 0.374.

When we turn from the active population to the entire population (Table 8) we see first that the overall distribution of public earnings becomes less equal. The Gini coefficient rises from .324 to .396. This is the obvious result of adding 10 percent of non-earning households to the bottom of the sample. The interesting result is, however, that when private income and a very significant increment of pensions and other SCF payments are added, the distribution of income per household member is almost as

equal for the entire population as for the active population alone. The meaning of this finding is that pensions and other SCF payments, and possibly also private incomes, are concentrated in the group of non-earners to a sufficient degree to assure that their addition to the population does not open wider income gaps. This is definitely an achievement of the support system and of private activity. A similar finding emerges also from the ISIP estimates (See Table 9 and Ofer-Vinokur 1980). What is somewhat surprising is that the Gini coefficient does not decline for the entire population when non-wage income is added. It may be an artifact of the less than full account of wages discussed above.

Comparison With Other Studies

Information on the distribution of household income is far more scarce in the Soviet Union than are data related to the size distribution of wages. In the rare instances when some statistics do appear, the types of population, concepts of income and the structure of the sample are not clear. For these reasons, our comparative analysis is restricted to only three sources of data: Western computations based on Soviet literature as presented by McAuley and the results of ISIP and SIP surveys. They are shown in Table 9. As presented, most measures of dispersion, with the small exception of the decile ratios, demonstrate a clear rise in the level of income inequality over the period 1967-1979. However, a careful analysis of differences in methodology and biases in the data put this conclusion in great doubt. First, McAuley himself and others pointed out that his estimates understate inequality in 1967-68. This is a conclusion reached by Bergson (1984, pp. 1068-69) among others on the basis of an alternative estimate by Wiles (1974) of a decile ratio of 3.5-3.7 for 1966, which is similar to those estimated by both SIP and ISIP for later dates. Considering McAuley's sources, mostly Soviet official sources, it is highly

likely that he was not able to take full account of private sources of income that contribute in the other two samples to a higher level of inequality.

Second, the rising level of inequality between ISIP (1973) and SIP (1979) also raises some questions of comparability. There is a much stronger impact on inequality by the group of unrelated active individuals on SIP results than in the case of ISIP. This difference alone explains about half of Gini differences between the two estimates, and it is unlikely that it can be exclusively linked to time trends. More likely, the difference results from sampling and reporting differences, one of which may be the different nature of the two samples. A higher concentration in the SIP sample of individuals who made a lot of money in the Soviet Union, especially through private activities, may be explained by the greater entrepreneurial spirit of emigrants who chose to go to the US rather than to Israel. A similar argument may be extended to the entire SIP sample, namely that it includes a higher proportion of people with higher, sometimes very high, private incomes, another contribution to the higher level of inequality. If one adds to this the fact that the decile ratios of ISIP are somewhat larger than those of SIP it becomes doubtful whether any residual is left for a trend toward increasing inequality over the 70's.

The last relevant piece of evidence on the issue is a pronouncement by Soviet scholars that the decile ratio for per capita income in 1973 for the entire Soviet population (including farm population) was 3.7 (Alexandrova and Federovskaia, 1984, p. 21). Since the addition of the rural population may add about 0.2 to the ratio, the implied urban ratio comes to about 3.5, almost exactly that for SIP and ISIP. It is hard to believe that the Soviet estimate fully includes private incomes, which makes the estimate

even more of a surprise. It is also much higher than McAuley's similar estimate for 1968 of 3.1 (1979, p. 65).

Our conclusion at this time is that there is no evidence in the data so far for a trend of declining inequality of incomes in the Soviet Union over the 70's as sometimes claimed by Soviet scholars. In fact, our results point to a stable distribution of income and do not rule out the possibility of rising inequality.

Comparison With Other Countries

Are incomes in the Soviet Union distributed more equally than in Western developed countries? A priori reasoning has it that indeed this should be the case at least for public incomes of the urban European Soviet population. It goes as follows: start with a distribution of wages per worker that is as equal or even slightly more equal than in the West. The exceptionally high level of participation of women in the labor force should make wage distribution per household member even more equal. The small size of the average family and the small variance in family size that goes with it should keep the distribution of wages per household member almost as equal as that of wages per worker. Finally, considering that non-wage sources of public earnings, like property income and the like, are almost completely absent and that the impact of SCF payments is similar to that for other countries, it follows that a greater degree of equality ought to be found in the Soviet Union. These considerations exclude a number of factors working in the opposite direction in the Soviet Union, namely, the existence of a substantial Moslem population with demographic characteristics that tend to raise inequality, the relatively large rural sector with a similar effect, and the phenomenon of private incomes.

The SIP and ISIP data in Table 10 for the USSR exclude the Moslem and rural populations, and some entries exclude private income. They are

compared with data compiled by Sawyer (1976) and on further calculations by Bergson (1984) for Western countries. By and large it can be stated that the 1973 ISIP estimates with or without private incomes are consistent with the above considerations and show a more equal distribution of income in the Soviet Union than in six of the seven countries presented. The differences are significant between the Soviet Union and France, Canada and U.S. and marginal when compared with Australia, Norway and the United Kingdom. The comparison with Sweden, on a post-tax income basis, shows obvious greater Swedish equality. However, when the Soviet 1979, SIP estimates are considered, they show a higher Gini coefficient than that of all other countries with the sole exception of France. In both comparisons the Soviet distribution is "stronger" in terms of equality at the lower end: the lowest tenth and fifth of households are receiving relatively higher shares of total (per capita) income than in most countries. Even according to the 1979 estimates these shares are higher than those in France, Canada and the United States. While not shown in the Table, McAuley's estimates for 1967 put the Soviet Union at much more equal point than all other countries on the equality scale.

It is our feeling that due to the considerations given above, inequality as estimated by the SIP sample may be somewhat exaggerated. It must be considered highly unlikely that income in the Soviet Union would be distributed as unequally as in the United States. Even so, the SIP estimate certainly brings the Soviet Union nearer to the other countries for which data are available.

A number of additional considerations qualify the comparisons as presented in Table 10 in different directions. First, according to Sawyer, the data related to Western countries tend to underestimate the inequality of income due to possible underreporting or entire omission of capital

gains, fringe benefits and investment and entrepreneurial income (Sawyer, 1976, p. 4). Most of these income elements are distributed rather unevenly. Their omission may justify comparisons with only public incomes in the Soviet Union. On the other hand, while there are good reasons to assume that in both SIP and ISIP there was fuller reporting of incomes, the Soviet samples exclude households that belong to the 'elite' group in the Soviet Union, a group that enjoys many extra monetary and non-monetary benefits. On the basis of data assembled by Matthews (1978), Bergson estimated those perks as adding about 1.5% of all incomes to the upper tenth or fifth of all households (1984, pp. 1070-71). Such a correction may add a non-insignificant degree of inequality to the Soviet estimates.

Second, there is reason to believe that the impact of free services and subsidies provided to the Soviet household by the government have a higher impact on equality of total income than in most Western countries. Education and health services in the Soviet Union are almost entirely free and there is a very substantial rent subsidy. Estimates based on ISIP for 1973 show that the overall impact of non-money SCF allowances on overall inequality, like the Gini, amounts to more than 10 percent (the Gini coefficient for the entire population declines from .305 to .260) (Ofer-Vinokur, 1986).

Third, one has to consider the impact of taxes. Unlike the West, Soviet income taxes are very low and of limited progressivity. Most taxes are turnover taxes with different rates on different consumption goods. There is reason to believe that post-tax data for the Western distributions would move it nearer to the Soviet. The comparison with Sweden in Table 10 may also point in this direction.

Finally, Bergson brings up the point that in such comparisons some normalization for different levels of economic development must be made.

Distributions are typically much less equal for countries at earlier levels of development and tend to become more equal as development progresses. Among the groups of countries represented in Table 10 the Soviet Union has the lowest level of GNP per capita, a common approximation of the level of development (see Bergson 1984, p. 1070). Thus, normalization for this factor gives the Soviet distribution some more credit in the comparison. Part of this credit is, however, taken away because rural and Moslem populations are excluded. This exclusion is important as an offset because one of the reasons for a lower level of income equality in less developed countries is the higher share of rural population and the larger variance of rural household size. A small additional measure of 'credit' may be allowed to the Soviet distribution on account of its very large size, which is bound to create higher variance of conditions of life and thus incomes, compared with smaller countries of more uniform character (See Wiles 1974).

The analysis must of necessity prove inconclusive to some extent. We conclude, however, that it is still reasonable to assume that, with normalization for level of development, income in the Soviet Union is distributed in a more equal fashion than in most Western countries. We also conclude that this holds in all probability even without normalization. The fact that those conclusions are not easy to demonstrate, however, testifies that the edge in equality for the USSR is not very significant.

A Preliminary Note on the Concentration of Wealth

Under Soviet socialism the ownership of 'means of production', that is productive capital, is almost completely excluded. Exceptions are mostly private agricultural plots. In addition, most residential capital is also publicly owned. Accumulation of wealth is therefore limited to some

private houses and cooperative apartments, to private plots, to household appliances and cars, to valuables like jewelry and to a limited list of financial assets - savings accounts and government bonds and cash. There is also the illegal production capital of the second economy. These limitations, plus the relatively short time span over which wealth could have accumulated and the rather low level of private income, must have limit the extent of accumulation thus far and in the future as well. Nevertheless, both ISIP and SIP asked about wealth and provide one of the first opportunities to look into this aspect of equality in the Soviet Union. At this point our observations are very preliminary.

The conventional definition of wealth relates to the sum of several kinds of assets. In both our surveys, these assets include family possessions (such as houses, cooperative apartments, private and dachas, cars) and family financial assets (such as savings in the bank, cash and government bonds). The SIP survey also asked about furniture and other valuable items like jewelry. Another difference is that ISIP asked about the purchase price, while SIP asked about the current, resale value. Questions about liabilities such as mortgage, and money owed were included only in ISIP. On the basis of ISIP, therefore, it is possible to calculate gross and net wealth. On the basis of SIP only the former.

The main results concerning the size distribution of total wealth and financial assets in 1973 and 1979 are presented in Table 11. The results show that inequality of wealth is much greater than inequality of personal wages or income of households. The top 1% of the households own approximately 5-7% of the total sum of wealth; the top 5% own between 23-28%; and the top 10% own more than 40%. On the other end, nearly half of all households under ISIP and a quarter under SIP reported no assets. The Gini coefficients for all households are .77 in ISIP and .61 for SIP.

The size distribution of financial assets is more unequal than the distribution of total wealth. The top 1% of all households own more than 11% of the total sum of these assets, and the top 10% approximately 45%. The lowest 50% of households have between 0-6 percent of the total sum of financial assets. The Gini coefficients are .83 for ISIP and .64 for SIP.

Table 11 also presents information on the distribution of wealth in Western countries. Needless to say, comparability with the Soviet data is highly problematic. Even so, there is a much higher concentration of wealth in the West among very few rich families than in the Soviet Union. The differences between the Gini coefficients seem to be narrower but the main reason for this is most likely that the proportion of households without wealth in the Soviet samples (at least those reporting no wealth) is much higher than in the West. In principle, current income derived from wealth should have been included as part of income, and its offset on inequality already taken into account. We have seen that for both the Soviet Union and the West the inclusion of income from assets was not complete. But even if it were, the distribution of wealth itself contributes to the degree of economic inequality, in the form of economic security, attending emergencies, and social and political status and influence. The impact of the distribution of wealth on overall economic equality depends (in addition to its own size distribution) also on its quantitative weight, relative to current incomes, and on the correlation between the distributions of income and wealth. It is very likely that, as in the West, the correlation between income and wealth in the Soviet Union is also rather high. The impact of wealth on economic equality in the Soviet case is also weaker by comparison for the amount of privately-owned wealth relative to income, is less than in the West.

Conclusions

Without normalization for the level of development, and also for the large size and the heterogeneity of the Soviet Union, the findings in this paper support the view that public income per household member is distributed among households more equally than in most advanced Western countries. Wages per worker are also somewhat more equally distributed, but the Soviet advantage here is narrower. The incorporation of privately earned incomes draws the Soviet distribution even closer to those in the West. Normalization, however, especially for the level of development, may put the Soviet Union one step above most Western countries on the equality chart. If, indeed, after normalization even wages are more equally distributed than in the West, then credit should be given to the historically intensive process by which the USSR has raised the educational level of the labor force. It is highly likely that the resulting increased supply of highly trained academics, technicians and skilled workers made possible the significant reduction of the earnings differentials that took place in the 50's and 60's. According to Soviet sources, the decile ratio of wages fell between 1946 and 1967 from 7.2 to 2.8 (Rabkina and Rimashevskaja, 1978, pp. 20). Further study is needed to substantiate this proposition.

A second probable explanation for the better showing of the Soviet Union is the high level of participation of workers in the labor force. The exact effect of this factor on the size distribution of income also deserves further study, but here too, as in the sphere of education, the Soviet Union started the process earlier than others. A third contributing factor is the high level of demographic uniformity in household size and structure achieved in the Soviet Union, at least as far as non-Moslem populations are concerned. Variation in household size, especially in the

number of children, is an important explanation for differentiation in income per capita. The hardships and economic pressures imposed on the Soviet population by the regime helped to expedite the natural process of declining fertility and household size. It also probably contributed to raising the level of income equality at an earlier developmental stage. To the extent that these policies in the spheres of education and female participation in the labor force, plus the demographic consequences of Soviet consumption policies, all may be included as integral components of "Soviet socialism," it deserves credit for the higher degree of equality that has been achieved. The fact is, however, that the elements that are considered the essence of socialism, that is, a higher degree of equality brought about by the elimination of property income, by better welfare programs and by a higher level of equality under given demographic and human capital conditions, have yielded only a marginal difference and that a portion of even this contribution is offset by inequality in the distribution of income derived from the second economy on the one side and the special privileges to the elite on the other.

Socialism was established for a number of reasons and this is not a place for its overall evaluation. When we consider its achievements in the sphere of income equality, however, our conclusion is that it is highly doubtful whether this small advantage in equality, assuming it is there, outweighs the heavy cost that the Soviet society has been paying in terms of denial of basic freedoms, not to mention the price in terms of the level of income. When socialism was advocated or even established, its claim for greater degree of equality was based on comparison with the more or less pure market economies. Since then the market system has undergone rather drastic changes in the direction of mixed economies with a substantial degree of government intervention in the supply of public services and in

income maintenance and distribution. This alternative has presented a constant challenge to Soviet socialism. It seems that in the sphere of income distribution the Soviet Union may be a slight winner, but even at that a Pyrrhic winner.

Appendix I

One way to check the improvement brought about by the reconstruction of the sample is to compare the average monthly wage after reweighting with Soviet official figures for average wages. The official Soviet figure is 163 rubles (for 1979), and ranges for SIP reweighted figures are between 150.7 (average wage in the main place of work) and 154.5 (in the entire public sector). The relatively small remaining difference may be due to a host of reasons, including the fact that at present the weighting does not consider all possible criteria, such as age or size of city. Even so, the estimates are close enough to raise our confidence that wage differentials in the weighted sample also approximate the true differentials in the Soviet Union.

To compare the results based on the SIP sample with results published in the Soviet Union, it is necessary to choose not only a referent population, but also a specific year or years. Following is the distribution of respondents by the last normal year of their work in the public sector:

YEAR	PER CENT
1972-76	1.6
1977	2.3
1978	26.1
1979	47.0
1980	16.2
1981-82	6.7

On the basis of this distribution, 1979 was accepted as the reference year for comparison of SIP data with that published in the Soviet Union. Clearly some variance among wages is due to variance, rise, of wages overtime, from 1972 to 1982. Ideally this part of the variance should be eliminated and only wage differentials at a given year should be measured. A number of attempts were made to adjust non-1979 to wages of 1979, using Soviet official data on wages. The differences found were too small to justify the arbitrary adjustment of individual wages on the basis of group averages.

Footnotes

1. For more detailed results see the longer version of this paper.
2. See Alec Nove (1982).
3. Table 5 is a short version of a table prepared originally by Bergson, but the part of the data related to the Soviet Union is new and based on the Israel and SIP weighted samples. Also new in this table are data related to France and the Netherlands.
4. The ISIP estimates for post-tax decile ratio of wages is 3.1 as compared with 2.8 for pretax wages.
5. The question on total income was: "on the average, what was the total gross income received per month by you (and all the members of your family) during the [last of the year LNP]?" The marginals for this question show that there are 2,749 valid cases, 2 cases with income equal to zero and 44 missing cases.
6. According to the results of family budget surveys done in the Soviet Union, in 1980, the "free" social services were 14.6 percent of total income (NK SSSR, 1981, p. 383).
7. In principle it can be even more equal depending on the above. See Ruben Gronau (1985); Simon Kuznets (1981).
8. The fact that the decile ratio declines sharply to 3.5 also supports the claim about the bias in the distribution of public earnings in SIP.

References

- Aleksandrova, A. and E. Federovskaia. 1984. "Mechanism formirovaniia i vozvysheniia potrebnostei." Voprosy Ekonomiki. 1:15-25.
- Atkinson, Anthony B. 1983. The Economics of Inequality. Oxford: Clarendon Press.
- Bergson, Abram. 1944. The Structure of Soviet Wages. Cambridge, Mass.: Harvard University Press.
- _____. 1984. "Income Inequality Under Soviet Socialism." Journal of Economic Literature. 22:1052-1099.
- Chapman, Janet G. 1977a. "The Distribution of Earnings in Selected Countries, East and West." Presented at Symposium on "Technology, Labor Productivity and Labor Supply," Racine, Wisconsin, Nov., 1977.
- _____. 1977b. "Soviet Wages Under Socialism." In Alan Abouchar, ed., The Socialist Price Mechanism. Durham, NC: Duke University Press.
- _____. 1979. "Are Earnings More Equal Under Socialism." In John R. Moroney, Ed., Income Inequality. Lexington, Mass.: Lexington Books.
- _____. 1983. "Earnings Distribution in the USSR, 1968-1976." Soviet Studies. 35(3): 410-413.
- Cromwell, J. 1977. "The Size Distribution of Income: An International Comparison." The Review of Income and Wealth. 23:291-309.
- Gronau, Ruben. 1984. Effect of Women's Earnings on the Inequality of Income Distribution: Israel 1968-1980. The Maurice Falk Institute for Economic Research in Israel.

- Karpukhin, D.N. and N.P. Kuznetsova. 1968. "Dokhody i Potrebleniye Trudyashchikhsya." In Trud i zarabotnaya Plata v SSSR. Publishing House "Economika," Moscow.
- Kuznets, Simon, "Size of households and income disparities," in Research in Population Economics, Vol. 3, eds. Julian Simon and Peter A. Lindert. Greenwich, Ct.: JAI Press, 1981, pp. 1-40.
- McAuley, Alastair. 1977. Soviet Anti-Poverty Policy 1955-1975. Institute for Research on Poverty. Discussion Papers. Madison: University of Wisconsin.
- _____. 1979. Economic Welfare in the Soviet Union. Madison: University of Wisconsin Press.
- _____. 1982. "Sources of Earnings Inequality: A Comment on A. Nove's Income Distribution in the USSR." Soviet Studies. 34(3):443-447.
- Maier, V.F. 1977. "Aktual'nye Problemy Povysheniya Narodnogo Blagosostoyaniya." Voprosy Ekonomiki. 11:47-56.
- Migranova, L.A. and N.E. Rabkina. 1976. "Izmenenie Differentsiatsii pri Prevrashchenii Zarabotnoi Platy v Dokhod Sem'i." In N.M. Rimashevskaya, ed., Sotsial'no Economicheskie Problemy Blagosostoiania. Moscow: Tsentral'nyi Economico-Matematicheskii Institut.
- _____. 1979. "Izmenenie Differentsiatsii pri Prevrashchenii Zarabotnoi Platy v Dokhod Sem'i." In Potrebnosti Dokhody Potreblenie. Moscow: Akademia Nauk SSSR.
- Morrison, Christian. 1984. "Income Distribution in East European and Western Countries." Journal of Comparative Economics, 8:121-138.
- Nove, Alec. "Income distribution in the USSR: A possible explanation of some recent data", Soviet Studies, XXXIV, No. 2 (April), 1982.

- Ofer, Gur and Aaron Vinokur. 1979. "Family Income Levels for Soviet Industrial Workers, 1965-1975." In A. Kahan and B.A. Ruble, eds., Industrial Labor in the USSR. New York: Pergamon Press.
- _____. 1979. "Family Budget Survey of Soviet Emigrants in the Soviet Union." (With Yechiel Bar-Chaim). Research Paper No. 32, The Soviet and East European Research Center, the Hebrew University, Jerusalem. An updated version, The RAND Corporation, 1979.
- _____. 1980. "The Distribution of Income of the Soviet Urban Population." Presented at the Second World Congress of the Association of Soviet and East European Studies, Garmisch, West Germany.
- _____. 1980. "The Distributive Effects of the Social Consumption Fund in the Soviet Union." Presented at a Conference on Social Welfare and the Delivery of Social Services USA/USSR, Berkeley, California.
- _____. 1980. "Private Sources of Income of the Soviet Urban Household." (R-2359 NA). The RAND Corporation. Forthcoming in Gregory Grossman, ed., The Second Economy in the Soviet Union. University of California Press, 1981.
- _____. 1982. "Earnings Differentials Between Men and Women in the Soviet Union: A First Look." In S. Rosenfield, ed., Economic Welfare and the Economics of Soviet Socialism. Essays in Honor of Abram Bergson. Cambridge, England: Cambridge University Press.
- _____. 1983. "The Labor Force Participation of Married Women in the Soviet Union, A Household Cross-Section Analysis." Journal of Comparative Economics. July.
- _____. 1983. "Work and Family of Soviet Women: Historical Trends and Cross Section Analysis." Presented at a Conference on Trends in Education, Chelwood-Gate, England.

- Pryor, Frederic L. 1973. Property and Industrial Organization in Communist and Capitalist Nations. Bloomington, Indiana University Press.
- Rabkina, N.E. and N.M. Rimashevskaya. 1972. Osnovy Differentsiatsii Zarabotnoi Platy i Dokhodov Naselenia. Moscow.
- _____. 1978. "Raspredelitel'nye Otnosheniia i Sotsial'noe Razvitie." Economica i organizatsiia promyshlennogo proizvodstva. No. 5.
- Rimashevskaya, N.M. 1965. Ekonomicheskii Analiz Dokhodov Rabochikh i Sluzhashchikh. Moscow.
- Sarkisyan, G.S. and N.P. Kuznetsova. Potrebnosti i Dokhod Sem'i. Moscow: Publishing House "Economika".
- Sawyer, Malcolm. 1976. "Income Distribution in OECD Countries." OECD Economic Outlook: Occasional Studies. July: 3-36.
- Schroeder, Gertrude E. and Barbara S. Severin. 1976. "Soviet Consumption and Income Policies in Perspective." In Joint Economic Committee Soviet Economy in a New Perspective. Washington, D.C.: Government Printing Office.
- Tsentrал'noe Statisticheskoe Upravlenie. 1980. Narodnoe Khoziaistvo u 1979 g.. Moscow.
- Vinokur, A. 1975. "Surveys of Family Budgets in the USSR: A Review. Mimeo." The Hebrew University of Jerusalem.
- _____. 1976. "Average Net Monetary Income of Worker and Employee Families in the USSR from 1964 to 1973." Mimeo. The Hebrew University of Jerusalem.
- Vestnik Statistiki. 1983. 9:38.

Wiles, P.J.D. The Distribution of Income East and West. Amsterdam,
1974.

Yanovitch, Murray. 1963. "The Soviet Income Revolution" Slavic Review
XXII, (December), 4:683-97.

TABLE 1: Distribution of Gross Wages per Earner. 1979.

	WAGE CONCEPTS		
	Wages at the Main Place of Work (1)	All Wages in Public Sector (2)	Total Wages (Public and Private) (3)
1. Mean, rubles per month	150.7	154.5	175.7
2. Coefficient of variation	0.51	0.54	0.89
3. Gini Coefficient	0.244	0.249	0.304
4. Ratios between wages at indicated percentiles of distribution			
P_{98}/P_2	5.75	6.00	7.74
P_{95}/P_5	4.29	4.29	5.29
P_{90}/P_{10}	3.33	3.33	3.75
P_{75}/P_{25}	1.80	1.80	1.90
P_{95}/P_{50}	1.87	1.87	1.88
5. Mean monthly wages in given decile, rubles			
I	67.7	68.0	69.0
II	83.8	84.4	86.2
III	101.1	102.1	104.9
IV	117.1	117.8	120.4
V	128.7	130.2	140.3
VI	147.2	147.9	150.7
VII	155.1	156.8	169.1
VIII	179.1	182.8	199.9
IX	210.1	217.8	261.7
X	312.7	324.0	442.8
X/I	4.62	4.76	6.42

TABLE 2: Instances of Private Work by Occupational Groups and Sex

OCCUPATIONAL GROUPS	Public Work			Private Work			Rate of Participation in Private Work (%)		
	(number employed)								
	Total	Men	Women	Total	Men	Women	Total	Men	Women
TOTAL	2045	1027	1018	263	176	87	12.9	17.1	8.5
1. Faculty members and researchers	128	72	56	27	19	8	21.1	26.4	14.3
2. Engineers	484	318	166	49	46	3	10.1	14.5	1.8
3. Medical doctors and dentists	93	28	65	19	10	9	20.4	35.7	13.8
4. Employees in administration and planning	77	19	58	3	1	2	3.9	5.3	3.4
5. Teachers at high school	152	35	117	30	8	22	19.7	22.9	18.8
6. Employees in culture	144	70	74	31	15	16	21.5	21.4	21.6
7. Employees with special secondary level of education	272	70	202	10	6	4	3.7	14.3	3.0
8. Non-professional white collar employees	91	23	68	10	2	8	11.0	8.7	11.8
9. Blue collar workers in production sectors	110	101	9	19	19		17.3	18.8	
Skilled	108	83	25	21	20	1	19.4	24.1	4.0
Semiskilled	23	16	7	3	3		13.0	18.8	
Unskilled	87	66	21	14	12	2	16.1	3.0	9.5
Other	40	48		6	6		12.5	12.5	
10. Drivers	189	61	128	16	5	11	8.5	8.2	8.6
11. Blue collar workers in service sector	39	17	22	5	4	1	25.8	23.5	4.5
12. Other									

¹Workers who did not report their "grade" skill.

NOTE: All results presented in this table are based on the original non-weighted sample of 2,044 respondents.

TABLE 3: Per Hour Gross Wages at the Main Place of Work in the Public Sector and in the Private Sector by Occupational Groups.

OCCUPATIONAL GROUPS	Per Hour Gross Wages at the Main Place of Work in the Public Sector (RUBLES)	Per Hour Wages From Private Work (RUBLES)	Ratio Between Private and Public Per Hour Wages
Mean	1.08	8.14	7.5
1. Faculty members and researchers	1.38	8.18	5.9
2. Engineers	1.07	5.62	5.3
3. Medical doctors and dentists	1.21	32.96	27.2
4. Employees in administration and planning	0.97	3.5	3.6
5. Teachers at high school	1.15	4.94	4.3
6. Employees in culture	1.60	6.95	4.3
7. Several kind of employees with special secondary level of education	0.84	8.60	10.2
8. Non-professional white collar workers	0.77	3.26	4.2
9. Blue collar workers in production sectors			
Skilled	1.23	7.93	6.45
Semiskilled	0.98	6.19	6.32
Unskilled	0.96	18.17	18.9
Other ¹	1.04	6.85	6.59
10. Drivers	1.24	6.24	5.03
11. Blue collar workers in service sectors	0.85	5.54	6.52

¹ Workers who didn't report about their "grade" skill.

NOTE: All results presented in this table are based on the original nonweighted sample at 2,045 respondents.

TABLE 7: Distribution of Households by Income per Household Member:
Active Population, 1979.

	All earnings in Public Sector (1)	Total Income (2)
1. Mean, rubles per month	93.8	143.8
2. Overall variation	0.67	1.79
3. Gini Coefficient	0.324	0.324
4. Ratios between per capita income at indicated percen- tiles of distribution		
P ₉₈ /P ₂	13.9	12.0
P ₉₅ /P ₅	7.9	5.7
P ₉₀ /P ₁₀	5.2	3.5
P ₉₀ /P ₅₀	2.1	1.9
P ₇₅ /P ₂₅	2.2	2.0
P ₁₀ /P ₅₀	0.41	0.55
5. Lorenz statistics	Income shares of given groups (%)	
Lowest 5%	2.0	1.3
10%	2.5	3.1
20%	6.8	7.6
25%	9.6	10.3
50%	32.1	26.4
Highest 5%	14.2	25.1
10%	23.7	33.0
20%	39.5	45.8
25%	46.0	51.5
6. Decile income groups	Average per capita income in given decile, rubles.	
I	23.5	43.9
II	40.3	65.7
III	53.4	78.0
IV	65.7	89.3
V	76.6	100.5
VI	87.8	112.1
VII	100.7	130.2
VIII	116.2	157.4
IX	151.6	183.4
X	220.0	472.5
X/I	9.4	10.8

TABLE 8: Distribution of Households by Income per Household Member:
Total Population, 1979.

	All earnings in Public Sector (1)	Total Income (2)
1. Mean, rubles per month	84.1	140.1
2. Coefficient of variation	0.80	1.79
3. Gini Coefficient	0.396	0.382
4. Ratios between per capita income at indicated percentiles of distribution		
P ₉₈ /P ₂		12.0
P ₉₅ /P ₅		5.8
P ₉₀ /P ₁₀		3.8
P ₉₀ /P ₅₀	2.1	2.0
P ₇₅ /P ₂₅	2.8	1.97
P ₁₀ /P ₅₀		0.53
5. Lorenz statistics	Income shares of given groups (%)	
Lowest 5%		1.2
10%		3.0
20%	2.6	7.4
25%	4.9	10.0
50%	22.6	25.3
Highest 5%	15.6	25.3
10%	25.9	33.4
20%	42.8	46.4
25%	49.8	52.1
6. Decile	Mean per capita income in given decile, rubles.	
Income Groups		
I		41.6
II	21.7	61.4
III	41.4	75.1
IV	55.5	86.3
V	69.3	98.0
VI	81.0	109.1
VII	95.1	125.0
VIII	110.7	152.1
IX	140.8	182.0
X	214.5	467.9
X/I		11.2

TABLE 9: Distribution of Households by Per Capita Household Income.
Different Estimates

Types of Household	Income Share (%) of:				Pe rcentile Ratios				
	Lowest 10%	Lowest 20%	Highest 20%	Highest 20% Coefficient	p98/ P 2	'95 P 5	P90/ P 10	P10/ P 50	
Nonfarm Active Households, pre-tax 1967 (McAuley) (USSR)	4.4	10.4	33.8	19.9	.229		3.0		
Urban households, pre-tax Total, 1973 (ISIP)	3.7	8.7	39.5	24.5	.305	1.4	3.7	.55	
Active, 1973 (ISIP)	3.9	9.2	38.4	24.0	.293	1.9	3.7	.58	
Urban households, pre-tax Total, 1979 (SIP)	3.0	7.4	45.4	33.4	.382	1.8	3.4	.53	
Active, 1979 (SIP)	3.1	7.6	45.8	33.0	.374	1.7	3.5	.55	

SOURCE: Income shares and Gini coefficient for 1967 calculated by Bergson from frequency distributions that were compiled by McAuley (Bergson, 1984, p. 1070; McAuley, 1979, p. 57). Decile ratio for 1967: from McAuley (1979, p. 57).

TABLE 10: Income Shares of Selected Percentile Groups and Gini Coefficients.
Distribution of Households by the Gross Money Income per Household
Member. USSR and Western Countries, Specified Years

Population, Country and Year	Income Share (%) of			Gini Coefficient	Ratio between Income Shares at highest and lowest deciles
	Lowest 10%	Lowest 20%	Highest 10%		
Urban households USSR, ISIP, 1973					
Pre-tax total money Income	3.7	8.7	39.5	24.5	0.305
					6.6
Post-tax total money Income	3.8	9.0	39.5	24.6	0.302
					6.5
Post-tax money income from public sector	3.7	9.3	36.7	22.0	0.270
					5.9
USSR, SIP, 1979					
Pre-tax total money Income	3.0	7.4	46.4	33.4	0.382
					11.1
All households, pre-tax Australia, 1966-1967	3.5	8.3	41.0	25.6	0.317
					7.3
Norway, 1970	3.5	8.2	39.0	23.5	0.306
					6.7
France, 1970	2.0	5.8	47.2	31.8	0.398
					16.3
Canada, 1972	2.2	6.2	43.6	27.8	0.363
					12.6
U.S., 1972	1.8	5.5	44.4	28.6	0.376
					15.9
All households, post-tax Sweden, 1972	3.5	9.3	35.2	20.5	0.254
					5.9

SOURCES: For all Western countries, income shares from Sawyer (1976, p. 17).
All Gini coefficients for Western countries computed by Bergson from income shares
of decile groups. (1974, p. 1070).

TABLE 11: Concentration of Wealth and Financial Assets in USSR, UK and US (Total population)

	Gross Wealth USSR		Wealth UK, US		Financial Assets USSR	
	ISIP, 1973	SIP, 1979	1979	1972	ISIP, 1973	SIP, 1979
Mean, rubles	2,173.1	(27,000)	-	-	1,238.8	4,214.3
Coefficient variation	1.94		-	-	2.46	1.54
Lorenz Statistics	Share of given group (%)					
Lowest 25%	0.0	0.3	-	-	0.0	0.0
50%	0.0	8.9	-	-	0.0	5.9
Highest 1%	4.8	7.0	24.0	26.0	8.3	11.5
5%	23.4	28.7	45.0	45.0	35.8	28.6
10%	41.2	42.9	59.0	-	54.9	43.1
25%	70.7	69.5	-	-	83.0	72.8
Gini coefficient	.77	.61	.74	.76	.83	.64
Percent of household with no wealth or financial assets	58	19	-	-	68	28

SOURCE: Atkinson (1983, pp. 164, 173-174). For U.K., shares of adult population;
for U.S., shares of families. Gini coefficient for U.S. is relevant for 1962.

1. Wealth and Financial Assets in ISIP and SIP contain the same elements.

2. Differences in the percent of households without financial assets - 68 and 28 (1).
It is possible to explain by "Preparation for Immigration" - additional bias.11

Chapter Seven

The Life Course of Soviet Women Born 1905-1960

Barbara A. Anderson

The Soviet European urban population has low fertility, high female labor force participation, and a high level of educational attainment.¹ Low fertility in the urban part of the Soviet Union in combination with large Soviet losses in World War II led the Soviet government to encourage all able-bodied citizens to work for pay. The shortage of adult males after World War II helps to explain why the Soviet Union has the highest female labor force participation rate of any country in the world. Partly to increase the productivity of labor, the building of a high quality educational system has been a priority, and educational attainment has increased rapidly since the 1917 Revolution for both sexes.

The women interviewed in the Soviet Interview Project (SIP) General Survey are characterized by low fertility, high educational attainment, and high rates of labor force participation to an even greater extent than Soviet urban women as a whole. The bulk of the SIP respondents are from very large cities. Most are Jews, and Jews have the highest average educational level of any nationality² in the Soviet Union.

The lives of these well-educated, Soviet urban women are relevant both to Soviet manpower policy and to understanding the implications of recent changes in female labor force participation and fertility in the West. Figure 1 shows female labor force participation rates by age in the United States for 1950 through 1983 (U.S. Bureau of Labor Statistics 1985).³ Labor force participation rates of women over age 40 rose throughout the post-War era, as more and more women returned to the labor force as their children grew older. Since the early 1960's, however, labor force participation rates of American women in their twenties and thirties also have risen sharply. This has been partly due to declining fertility after the Baby Boom, but it also has been marked by increases in the tendency of women with young children to work for pay (Waite 1981). As shown in Figure 1, the dip in labor force participation traditionally associated with childbearing and the care of young children disappeared by 1983.

The women in the SIP General Survey have even higher labor force participation rates than American women. Figure 2 shows the labor force participation rates by age of the

¹ACKNOWLEDGMENTS: I would like to thank Brian Silver, Cynthia Buckley, Reynolds Farley, William Frey, and Victoria Velkoff for helpful comments. I also would like to thank Cynthia Buckley and Victoria Velkoff for research assistance, Mike Coble, Amy Hsu, and Kathleen Duke for assistance with graphics, and Judy Mullin for help with preparation of tables.

²In Soviet usage, "nationality" has the meaning of "ethnic group" in Western usage. Jews are considered a separate nationality in this sense.

³The values plotted at age 65 in Figure 1 refer to women age 65 or older.

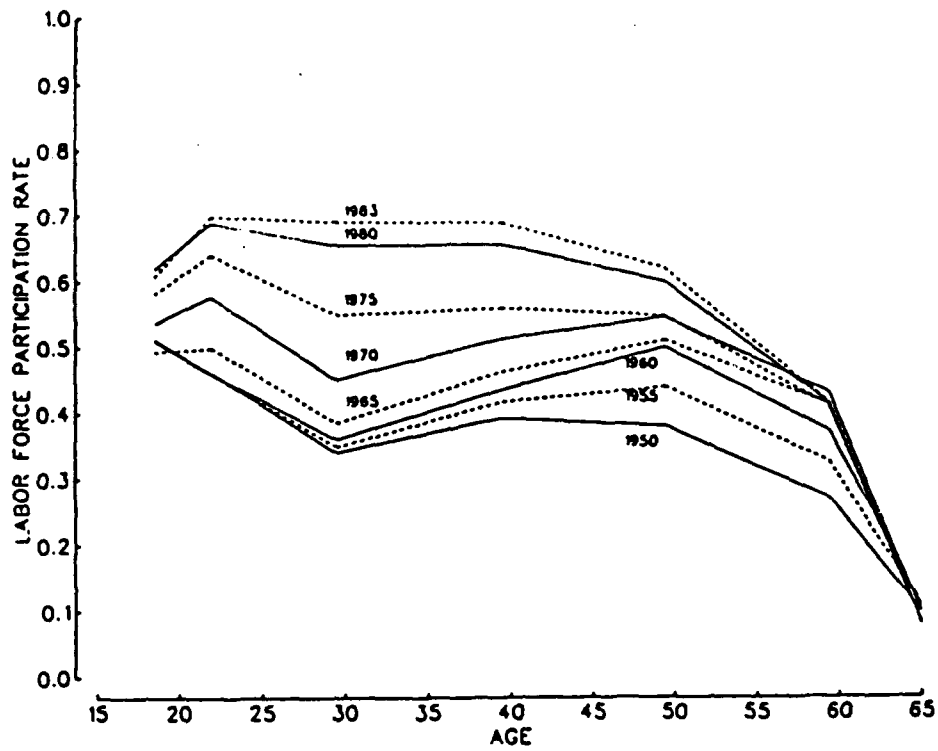


Figure 1: Labor Force Participation Rates of American Women

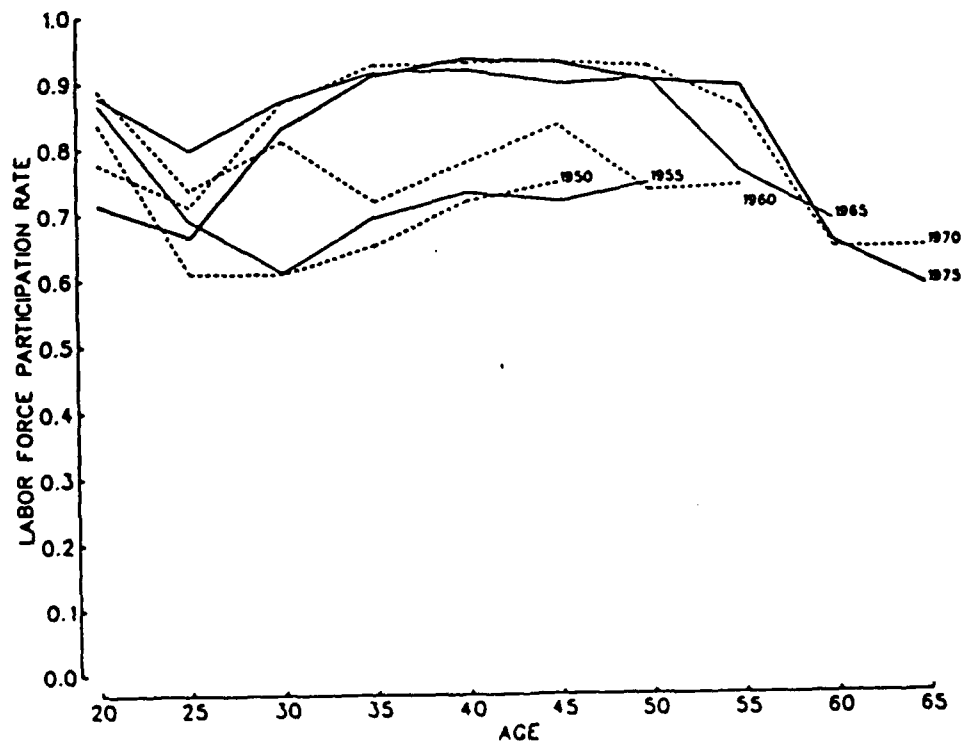


Figure 2: Labor Force Participation Rates of Women in SIP General Survey

women in the SIP General Survey from about 1950 to about 1975.⁴ The dip associated with childbearing disappeared in the SIP data by 1965.⁵ Also, labor force participation rates of the women in the SIP General Survey were higher even in 1960 than the rates for American women in 1983.

The Soviet government has been concerned with how to bring "labor reserves" into work for pay, since the Soviet economy faces an increasing labor shortage as the small post-Baby Boom cohorts move into the prime working ages (Anderson 1986a; Anderson and Silver 1985; Feshbach and Rapawy 1973, 1976). Especially in cities, efforts have been made to increase the labor force participation rates of all residents, including those past normal retirement age. However, the labor force participation rates of well-educated urban women, such as those in the SIP survey, are not a likely source of any greater contribution to the labor force. Other solutions, such as greater investment of capital, or the recruitment of untapped labor from rural areas, must be sought in order to increase production in the future.

The recent increases in female labor force participation rates for American women have led to speculation about how high female labor force participation rates might rise and about what combinations of work and family life are possible when almost all women hold paid jobs (cf. Bumpass 1973; Butz and Ward 1979; Westoff 1978). Does a very high female labor force participation rate eventually force women to choose among childlessness combined with a career, having children and forgoing market work, and settling for a substantially less successful career than would have been possible otherwise? What are the inevitable trade-offs for women between childbearing and work for pay? The experience of women from the Soviet Interview Project points to one possible pattern of labor force participation and childbearing.

⁴The data in Figure 2 are from retrospective reports of women in the SIP General Survey. They refer to a five-year period centered on the year for which the data are plotted. For example, the data for 1950 refer to 1948-1952, and the data for 1975 refer to 1973-1977.

The data in Figure 2 refer to employment in public sector jobs. The vast majority of working people in the Soviet Union hold public sector jobs. Public sector employment does not include legal private work, such as marketing home-produced vegetables, nor illegal private work, such as black market transactions. It also does not include unpaid home production. In this paper, when referring to the behavior of people in the SIP General Survey, the term "work for pay" or "paid work" will be used interchangeably with "employment in a public sector job."

⁵The dip in Figure 2 for women in their early twenties is primarily related to school attendance rather than to childbearing.

The Life Course Approach

I use a life course approach to examine the order in which women complete their education, begin to work for pay, and begin childbearing. How does the sequence in which these events occur affect a woman's work career and the income she receives?

There has been growing interest among Western sociologists in the life cycle or the life course (cf. Elder 1985). The life course approach focuses on sequences and timing. This orientation grew out of the study of "career contingencies" in models of achievement. As Duncan, Featherman, and Duncan (1972: 205) write,

The notion of career contingencies used in this research is that of events occurring subsequent to the determination of family background, that may have a bearing upon the level of ultimate occupational achievement.... A man who undergoes a period of poor health, for example, may thereby be handicapped in his subsequent career.⁶

I am able to use a life course approach because the SIP General Survey collected a large amount of data pertaining to household and family demography. The amount of detail about life experiences collected in the SIP General Survey is unusual even by Western standards. For the respondent and for the respondent's spouse, we know in what years that individual did not hold a public sector job for six months or more, when the household migrated from one city or town to another city or town, when children were born, and when children died.

We have even more detailed information for a random one-third of the sample. For this subsample, we know about the use of and attitudes toward contraception, the number of abortions, views of the ideal number of children, and the number of children that the mother of the respondent bore.

Table 1 shows when various important life events occurred on average for each cohort of respondents.⁷ The women in the SIP General Survey tended to begin working at

⁶ For a more detailed discussion see Sweet (1977).

⁷ We know the actual year that schooling ended for respondents who had some specialized schooling. We do not know the actual year that schooling ended for respondents who had no specialized schooling. Specialized schools include all institutions of higher education, including tekhnikurns and VUZ's (higher educational institutions). They also include specialized secondary schools and vocational-technical schools. Michael Swafford assigned years of schooling equivalent to eleven education levels. For respondents who had no specialized schooling, age at completion of schooling was estimated by adding the years of schooling equivalent for the reported educational attainment to seven, the age at which schooling normally begins.

The age at which the respondent's most recent marriage occurred and age at the respondent's first marriage occurred were only asked of people who were married at the end of the LNP. The discussion of age at marriage, thus, is based on those people who

TABLE 1
Occurrence of Major Life Events for Women Born 1905-1960

Year of Birth	Average Age at				Percentage Who			
	Completion of Education	First Job	First Marriage	First Birth	Ever Married	Had No Children	Never Worked	Always Worked
1905-10	17.9	22.1	25.3	24.7	100.0%	0.0%	15.9%	25.0%
1911-15	18.5	20.6	23.5	25.5	100.0	.6	2.9	21.2
1916-20	19.6	21.9	22.5	24.6	98.1	1.9	3.8	17.0
1921-25	21.7	22.4	23.1	25.0	100.0	2.6	1.9	22.1
1926-30	21.3	21.3	22.2	23.9	100.0	1.7	.9	21.7
1931-35	23.7	21.9	23.6	26.0	98.2	5.3	1.8	32.5
1936-40	23.8	21.3	23.0	25.0	98.7	7.5	.9	37.3
1941-45	23.8	21.0	22.8	24.8	96.2	9.1	0.0	35.6
1946-50	22.9	21.2	22.1	23.3	96.2	13.0.	.8	28.0
1951-55	21.6	20.7	21.1	22.2	86.9	31.4	3.3	29.4
1956-60	20.3	19.5	19.8	20.9	70.7	56.0	13.0	35.5
Overall	21.8	21.3	22.5	24.4	95.5%	11.5%	2.8%	28.3%

about age 21 and to marry at about age 22. Earlier cohorts tended to have their first child at about age 25, while more recent cohorts have tended to begin childbearing at a younger age.⁸

Table 1 also shows the proportion of women by cohort who were ever married, the proportion who had no children, the proportion who never held a public sector job, and the proportion who held a public sector job every year from the time they first worked through the end of the last normal period of life in the Soviet Union (LNP) (or retirement age if that came earlier).⁹

Although a mere 3% of the women in the SIP General Survey never held a public sector job, only 28% worked continuously from the time they first held a public sector job through the end of their last normal period of life in the Soviet Union or through reaching retirement age. Thus, the high female labor force participation rates shown in Figure 2 occur because almost all women worked for most of their adult lives, but the majority spent some time without a public service job in the course of their careers. Although the women in the SIP General Survey worked 80% of the time between their first job and retirement, this high labor force participation rate was not the result of 80% of the women having an uninterrupted career and 20% of the women never holding a public sector job.

The low fertility of this population does not result from a large proportion remaining childless while other women had many children. Only 12% of all women were childless, but the average number of children ever born, even for women who had completed childbearing, is only about two.

The focus of this paper is on the experiences of these women while in the Soviet Union. However, in order to gain a perspective on what was typical of the women in the SIP General Survey and what was typical of all SIP respondents, some of the characteristics and experiences of the men in the SIP General Survey will be examined.

were married at the end of the LNP. The data on age at first job refer only to women who ever held a public sector job.

⁸ A retrospective survey done in Moskvoretskii raion of Moscow in 1965 estimated age at first birth to have remained close to 25 from 1945 through 1965 (Sisenko 1974: 31).

⁹ The last normal period of life in the Soviet Union (LNP) is defined as the five-year period before the respondent's life changed substantially due to the decision to emigrate. Although the end of the LNP was defined however the respondent chose, for the majority of respondents the LNP ended the month before they applied for an exit visa. The LNP of most respondents ended in 1978 or 1979.

EDUCATIONAL ATTAINMENT

Figure 3 shows the distribution of educational attainment by birth cohort and sex. For each sex, educational attainment increased substantially among recent cohorts, as indicated by the drop in the percentage who had less than seven years of education and the increase in the percentage with some higher education or completed higher education.

The educational attainment of the youngest cohorts was truncated. A larger proportion of those born since 1956 than of those who were born somewhat earlier had some higher education but had not completed higher education; many members of the youngest cohort were not old enough to have completed higher education before they left the Soviet Union. Even so, this is a highly educated population. Thirty percent of women born 1926-30 report that they completed higher education.

Education and cohort of birth are extremely intermingled, especially for women. The differences in educational attainment by cohort are so striking that when one talks about people whose educational attainment was less than completion of secondary school, one is actually talking about people who were born before 1931; 77% of those with less than completed secondary education were born before 1931. A substantial proportion of men in all cohorts had at least some higher education. However, 79% of all women with at least some higher education were born after 1930. The strong relation between cohort of birth and education means that analyses of the relation between education and other variables that do not take cohort of birth into account may misinterpret age effects as education effects.

MARITAL STATUS

The marital status distribution at the end of the LNP by birth cohort by sex is shown in Figure 4. Most women married in their early twenties; 66% married between ages 20 and 25. Only 16% of the women first married at age 26 or older. Only among those born after 1950 were over 5% never married while living in the USSR. These recent cohorts were still in the process of forming first marriages and probably would have ended up with proportions ever-married similar to those of earlier cohorts. For women born before 1921, the widowed outnumber the currently married.

Figure 4 shows a much higher proportion of young men never-married than of young women. For men, marriage occurred later than for women. Although 53% of the men married between age 20 and age 25, 43% of the men first married at age 26 or older.

Figure 4 also shows a smaller proportion of older men widowed at the end of the LNP than of older women. This is because wives tend to be younger than their husbands and also because widowers are more likely to remarry than widows in most societies. The

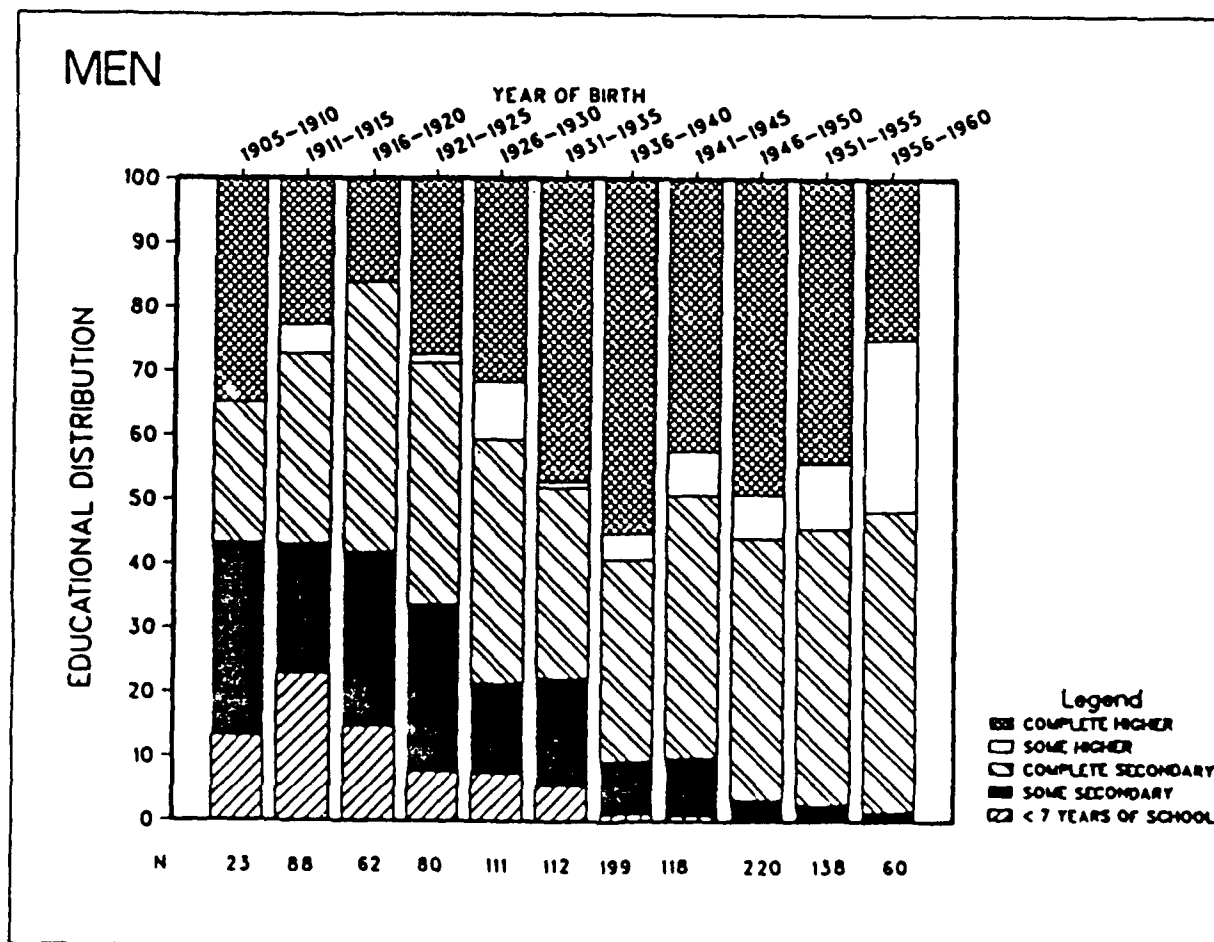
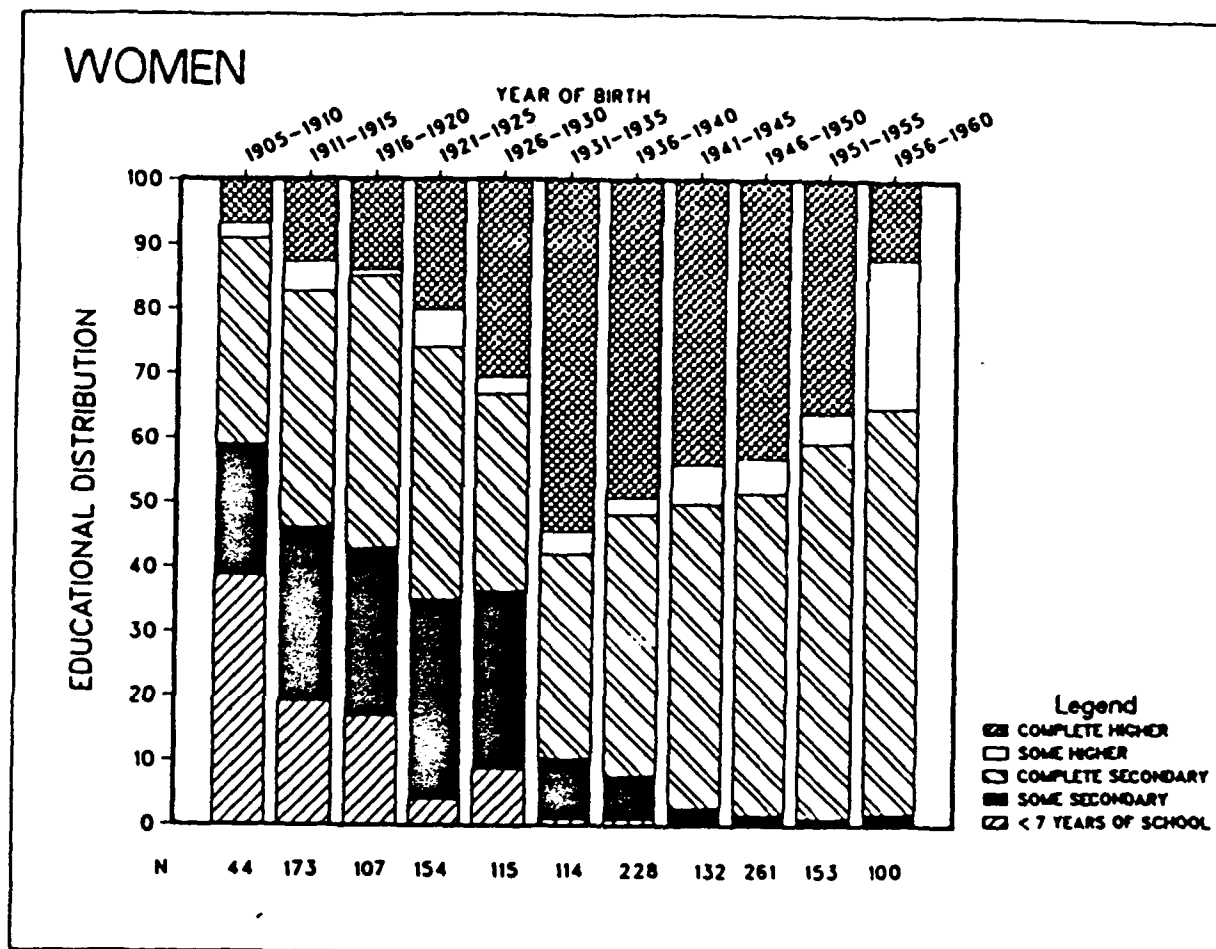
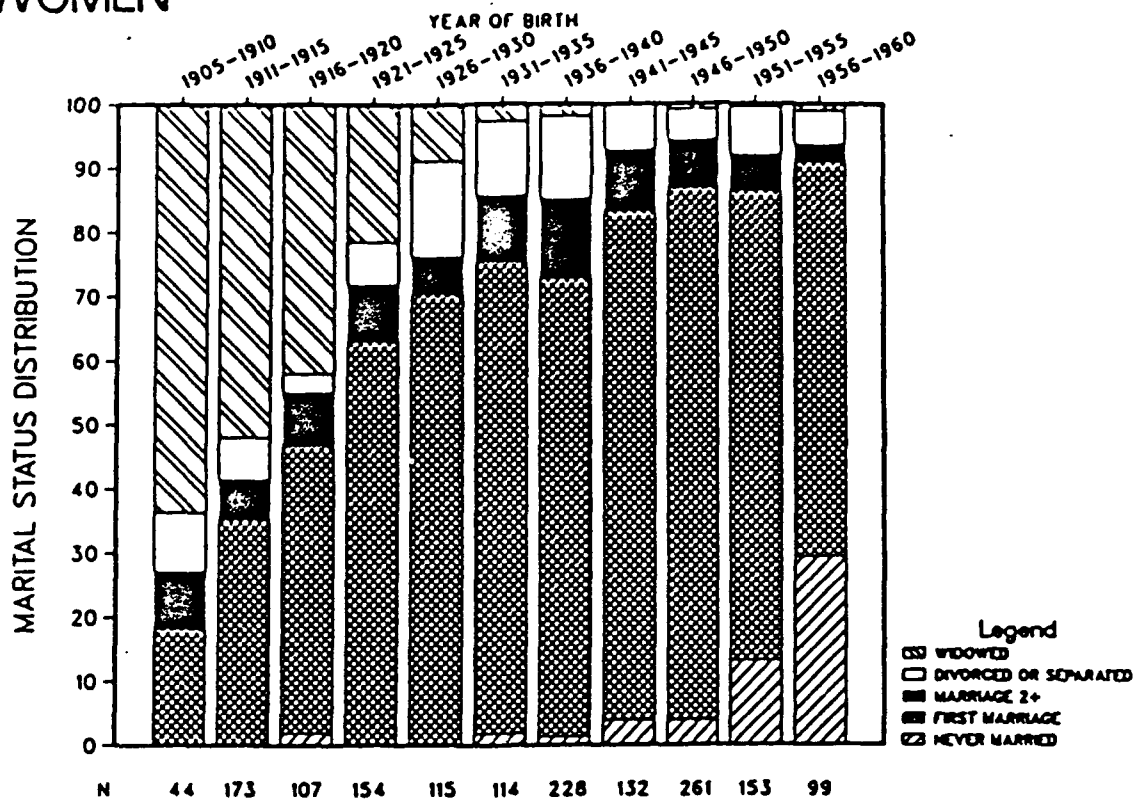


Figure 3: Educational Distribution by Year of Birth

WOMEN



MEN

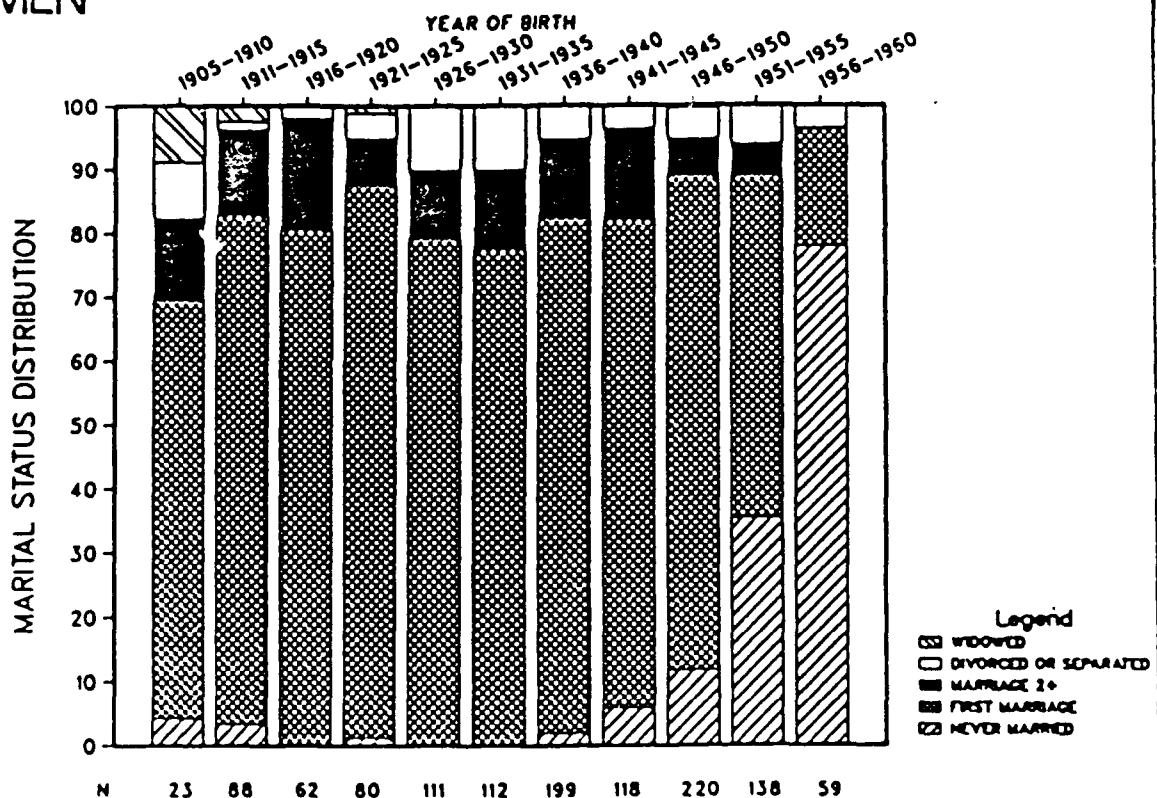


Figure 4: Marital Status Distribution at the End of the LNP by Year of Birth

tendency of widowed or divorced men to remarry is even greater among those cohorts in which men were in short supply due to losses in World War II.

CHILDBEARING

Figure 5 shows the distribution of the number of children ever born for each birth cohort of women. The average number of children ever born to each cohort also is shown.

It was unusual for a woman to have more than two children. Only 30% of the oldest cohort had three or more children. It also was unusual for a woman to have had no children. Only for women born since 1946, and still in the process of childbearing, are over 10% childless.¹⁰

Almost all children were born to married women. Only 6 women who never had been married reported having borne any children. Of the women who were married at the end of the LNP, less than 2% report that their first child was born before the calendar year in which they first married, and 9% report that their first child was born in the same calendar year as they first married.¹¹

For those who started childbearing after marriage, children tended to follow the marriage quickly. For 47% of women, a child was born in the first calendar year after the marriage. For only 24% of the women was the first child born three or more calendar years after the marriage. Thus, unlike the United States in which there has been a trend toward postponement of childbearing (Baldwin and Nord, 1984), for these women childbearing followed soon after marriage.¹²

¹⁰In a survey conducted in Moscow in 1970, women were asked whether they wanted to have more children. Only 16% of the childless women stated that they did not want to have any children. Among childless women under age 20, 91% planned to have children; 90% of childless women age 20-24 planned to have children; and 56% of childless women age 35-39 planned to have children (Kiseleva and Rilkova 1974: 59-61).

¹¹We know the year and month that each child was born. We know the year that a woman first married, for women who were married at the end of the LNP. Thus, for a woman who was married at the end of the LNP, we know whether she bore a child in the same calendar year as the marriage, but we cannot be certain whether the date of the first marriage was before the date of the first birth.

¹²Volkov (1977) notes that the interval between the date of first marriage and the birth of the first child has grown shorter for Soviet women over time. For women married in 1920-24, he reported that the average interval from marriage to birth of first child was 2.3 years, while for women first married in 1945-49, the average interval was 1.7 years. He comments that this decrease in the interval from marriage to first birth may be due to an increase in couples living together without formal marriage until they expect to have children. A study of Taganrog found that about 45% of women bore their first child within the first year after marriage (Rimashevskaja and Karapetian 1985: 43).

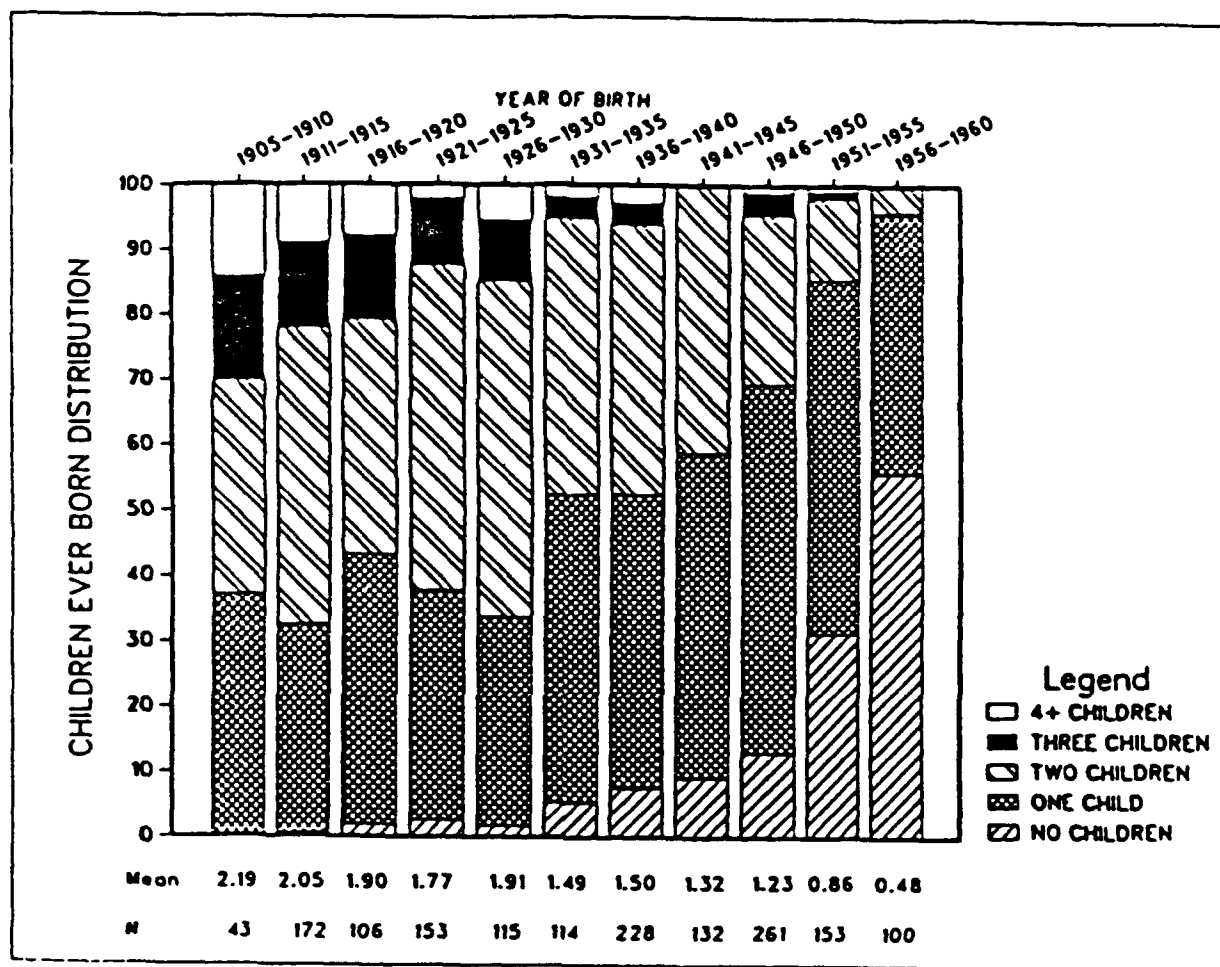


Figure 5: Distribution of Children Ever Born by Birth Year of Women

Coale (1973) has suggested that three things must be true in order for couples to limit their fertility. They must think it is morally acceptable to control fertility, they must have some effective means to control their fertility, and they must perceive that it is in their interest to limit their fertility.

Moral acceptability of fertility limitation and access to an effective means of limiting fertility were not a problem for most of the women in the SIP General Survey. Seventy-six percent of the women approved of contraception, 72% had used contraception, and 69% had had at least one abortion.

Abortion was extremely important in the control of childbearing. Figure 6 shows the distribution of the number of abortions by birth cohort. About one-third of the women had never had an abortion, one-third had had one or two abortions, and one-third had had three or more abortions.¹³ There has been some trend toward abortion becoming more common among the more recent cohorts, but the birth cohort of 1926-30 had the most abortions. These women were adolescents or young adults during and shortly after World War II.

Eleven percent of the women had more children than the number they considered ideal. The Soviet literature reports that women in Soviet European cities typically have fewer children than they consider ideal.¹⁴ When asked why they do not have more children, practical considerations, such as a shortage of housing space, often are cited (cf. Belova 1971, 1973). The women in the SIP General Survey who had more children than they considered ideal had significantly more abortions than women whose number of children did not exceed their ideal number.

Some women, such as those just mentioned, had more children than they wanted. However, the use of contraception and abortion are so common in this population that the primary determinant of how many children a woman had is whether the woman or the couple thought it was in their interest to limit their fertility. Whether a couple perceives that it is in their interest to control their fertility depends on psychological, social, and economic factors.

¹³The questions about abortions were not considered sensitive by most respondents. Less than 5% of the women refused to answer the question about whether they had ever had an abortion.

¹⁴For example, in Minsk in 1969, women reported an average of 2.6 for the ideal number of children but reported an average of 2.0 as the number of children they expected to have (Shakhov'ko 1975: 136). A similar pattern occurs in Armenian cities (Rimashevskaya and Karapetian 1985: 32).

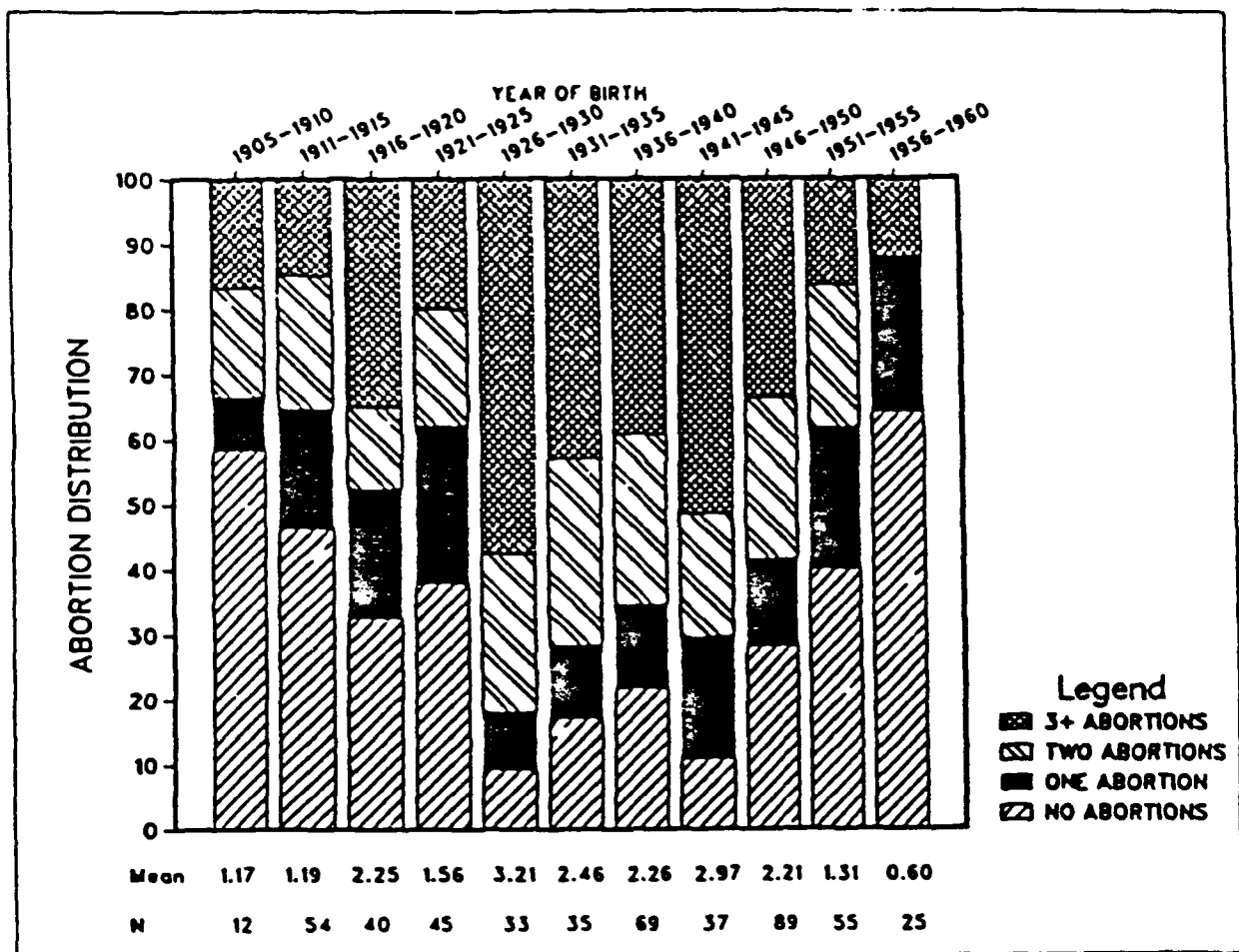


Figure 6: Distribution of Number of Abortions by Birth Year of Women

Many studies have found that how many children a woman's mother had influences how many children the woman has, perhaps through its effect on the number of children that the woman views as desirable (cf. Gustavus and Nam 1970). One way that a woman's educational level is thought to influence her fertility is through making her relatively more interested in activities other than childbearing and childrearing.

Several studies have found that cultural factors, such as ethnicity, religion, or religiosity, affect childbearing independently of socio-economic characteristics (cf. Anderson 1986a; Knodel and van de Walle 1979; Westoff and Potvin 1967). Most explanations of these effects relate to differences in subgroup norms about the value of children.

In the study of Soviet fertility, attention has most often been drawn to differences between traditionally Moslem and non-Moslem groups, but fertility differences also have been found between Finnic groups in the European part of the Soviet Union and Slavs who lived in the same region (Coale, Anderson, and Harm 1979). Soviet research has supported the point of view that members of traditionally Moslem groups in the Soviet Union tend to have more children than members of non-Moslem groups because they want more children rather than because of reluctance to use birth control (Belova 1973, 1975).

Studies of fertility differences among adherents of a single religion also have found that those who are more religious tend to have more children than those who are less religious. This has been found for Catholics in Portugal (Livi-Bacci 1971) and in Belgium (Lesthaeghe 1977). In this analysis, I examine whether being a religious Jew affected a woman's fertility.

Economic factors proposed to influence fertility are almost always viewed in terms of their effect on how many children the couple wants to have, that is whether the couple perceives that limiting their fertility is in their interest (cf. Becker 1960; Turchi 1975; Willis 1973). Along this line, economists argue that a woman's education will be negatively related to the number of children she has, because the higher her education, the higher the wage she could command if she worked for pay.

This argument assumes that there is a trade-off for women between childbearing and labor force participation and/or the wage rate that a woman will receive. The main cost of children typically is seen as the opportunity cost of the wife's foregone earnings because of the time she devotes to childcare (cf. Gronau 1973; Michael 1973).¹⁵

¹⁵Typically, female education is used as an indicator of the wage that a woman could command rather than actual wages of women who work, since the entire structure of female labor force participation and female earnings is assumed to be affected by childbearing.

Economists also predict that the higher the income of the husband, the more children the wife will have.¹⁶ This is because the higher the husband's income, the more children the couple can afford to support. These economists assume that children do not demand much of the father's time, or at least that they do not interfere with his labor force activity nor have a depressing effect on his income.

Analysis of the Determinants of the Number of Children Ever Born

The effects of various factors on fertility were examined through multiple regression analysis, using a combination of dummy variables and interval-level variables.¹⁷ All the variables used in the analyses are described in Appendix Table A1.

In all the multiple regression analyses, cohort of birth is taken into account regardless of the statistical significance of coefficients for individual birth cohorts or for the set of birth cohorts as a whole. This is because I seek to analyze patterns of the life course after cohort of birth has been taken into account, or controlled. It is important to take cohort of birth into account in the analysis of the number of children ever born because many women had not reached the end of childbearing by the end of the LNP.¹⁸

The results of the multiple regression analysis of the number of children ever born for women appear in Table 2.¹⁹ The results when only birth cohort and educational attainment are included in the analysis are shown in Panel A, and the results when

¹⁶The economic argument actually is that the higher the family income, the more children the wife will have. However, economists also argue that a woman will have fewer children, the higher the wage she would have received if she worked for pay. Since the main source of family income aside from the wife's income is the husband's income, the economic argument reduces to the expectation that the higher the husband's income, the more children the wife will bear.

¹⁷Dummy variables are assigned a value of "0" or "1" for each respondent, according to whether or not the respondent had the given characteristic, such as having or not having completed higher education, or having or not having completed secondary education.

¹⁸The youngest cohort, those born 1956-60, were on average age 20 at the end of the LNP. Many had not completed their education, and few were launched on a career. Because this youngest group had experienced few of the events analyzed in this paper, they will be excluded from the regression analyses, although information about them will appear in the figures.

¹⁹The questions about the ideal number of children and how many children the woman's mother had borne were only asked of a random third of the respondents. The analysis without these two items was very similar for the entire sample and for the random third. Both the results presented that include only birth cohort and education as independent variables and the results presented that include all variables refer to the random one-third of the sample for which all items were available.

TABLE 2

Multiple Regression Results for the Number of
Children Ever Born

Variable	B	t	Significance of t
PANEL A			
Results When Only Birth and Educational Variables are Included			
<u>Birth Cohort</u>			
<u>Dummy Variables</u>			
BN1620	-.054923	-.383	.7021
BN2125	-.093698	-.696	.4870
BN2630	.232570	1.555	.1205
BN3135	.026185	.171	.8641
BN3640	-.190513	-1.474	.1413
BN4145	-.281393	-1.894	.0588
BN4650	-.395967	-3.236	.0013
BN5155	-.896302	-6.585	.0000
<u>Educational Attainment</u>			
<u>Dummy Variables</u>			
COMPSEC	-.136161	-1.316	.1889
SOMEH	-.400707	-3.705	.0002
(Constant)	2.912193	28.942	.0000
$R^2 = .20854$		Adjusted $R^2 = .19103$	
Overall F = 11.90958		Significance of Overall F = .0000	
N = 463			

TABLE 2 (Cont'd.)

Variable	B	t	Significance of t
PANEL B			
Results When Additional Variables are Included			
<u>Birth Cohort</u>			
<u>Dummy Variables</u>			
BN1620	-.033255	-.238	.8119
BN2125	.019290	.145	.8844
BN2630	.367085	2.493	.0130
BN3135	.161136	1.075	.2832
BN3640	-.013502	-.105	.9167
BN4145	-.058243	-.391	.6962
BN4650	-.189242	-1.522	.1286
BN5155	-.648777	-4.657	.0000
<u>Educational Attainment</u>			
<u>Dummy Variables</u>			
COMPSEC	-.015325	-.149	.8814
SOMEH	-.221186	-2.017	.0442
<u>Ideal Number of Children</u>			
KIDSNO	.076587	2.659	.0081
<u>Number of Children Woman's Mother Had</u>			
MOMKIDS	.057906	3.127	.0019
<u>Dummy Variable for Being a Religious Jew</u>			
RELJEW	.287442	3.329	.0009
(Constant)	2.248823	14.164	.0000
$R^2 = .26370$ Overall F = 12.36979 N = 463			
Adjusted $R^2 = .24238$ Significance of Overall F = .0000			

additional variables are included are shown in Panel B. A schematic representation of the factors that were found to be important appears in Diagram 1.²⁰

Birth cohort and educational attainment are important for the number of children that a woman has borne. When only birth cohort and education are considered, women with completed secondary education have on average .14 fewer children than women with less than completed secondary education, and women with some higher education or more have on average .40 fewer children than women with completed secondary education.

Factors other than birth cohort and education also are important for the number of children ever born. The results in Panel B show that religious Jewish women have .29 more children than women who are not religious Jews but who are the same age and have the same educational attainment.²¹ Also, the larger the number of children that a woman considers ideal,²² and the more children that the woman's mother had, the more children the woman bore, even after birth cohort and education have been taken into account.²³

Even after whether the woman was a religious Jew, the ideal number of children, and the number of children the woman's mother had are taken into account, educational attainment is still important, but its effect on the number of children ever born is much weaker. After these three additional variables are taken into account, women with completed secondary education have, on average, .02 fewer children than women with less than completed secondary education, and women with at least some higher education have .22 fewer children than women with less than completed secondary education. The effects of education are weaker after these other variables are taken into account, because more educated women were less likely to be religious Jews, less likely to perceive a large

²⁰Birth cohort is not explicitly represented in Diagram 1 and successive diagrams.

²¹Twenty percent of the women in the SIP General Survey were religious Jews, 58% were non-religious Jews, and 22% were non-Jews. The non-Jews did not differ substantially from the non-religious Jews in their fertility behavior.

²²In the SIP General Survey, the mean of the ideal number of children was 2.1. This accords well with the results of a survey in 1969 which reported the average ideal number of children among women living in Moscow to be 1.9 (Belova, 1971: 41).

²³In regression analyses, some categories must be excluded for each independent variable that is converted into dummy variables. For education, the excluded category is those with less than completed secondary education. For cohort of birth, those born before 1916 are the excluded group. Thus, the coefficients can be interpreted as the net effect of a woman having a given characteristic in comparison with women who were born before 1916, who were not religious Jews, and who had less than completed secondary schooling.

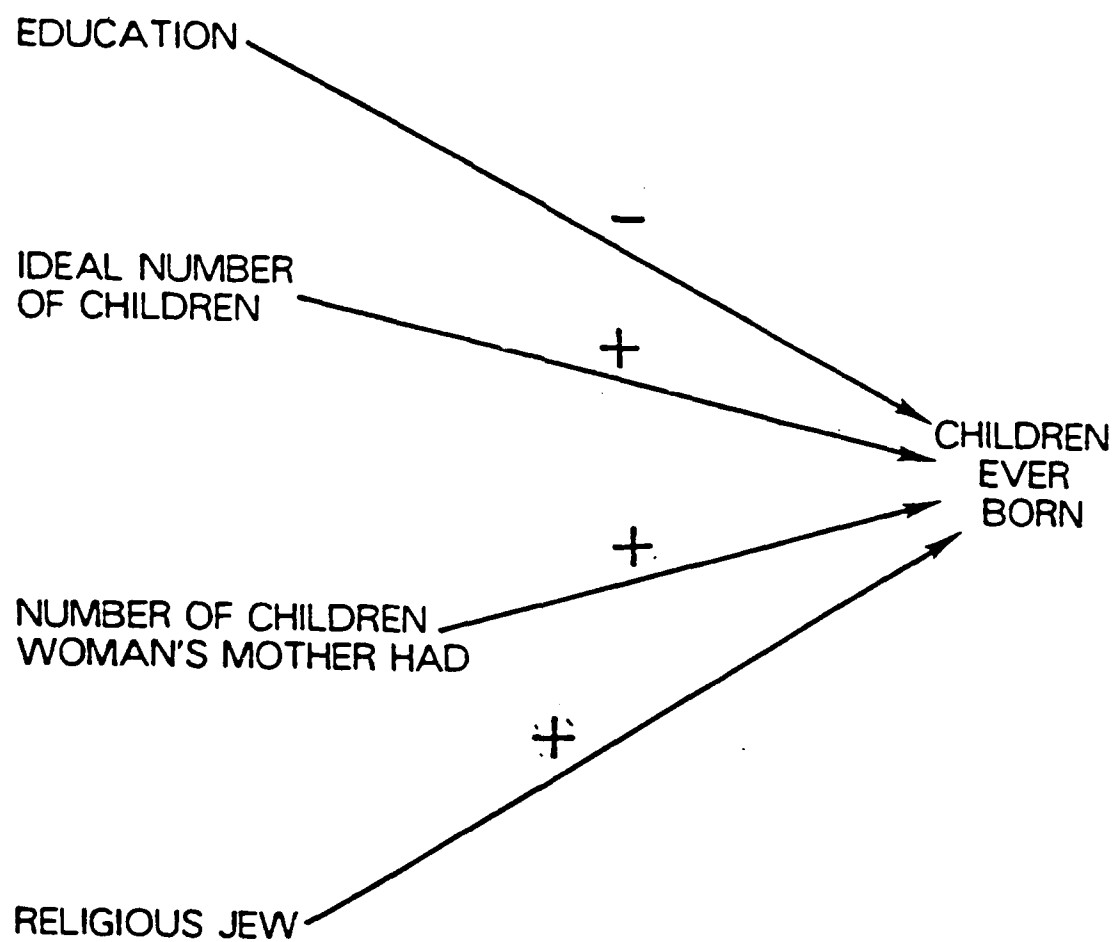


Diagram 1: Schematic Model of Determinants of the Number of Children Ever Born, for Women

number of children as ideal, and less likely to have had many siblings themselves than women with less education.

THE TIMING OF THE COMPLETION OF EDUCATION, FIRST EMPLOYMENT, AND THE BEGINNING OF CHILDBEARING

As suggested by the data in Table 1, the normal course of events for women in the SIP General Survey was to complete their education, begin working, and then bear their first child. For individuals, however, any sequence of completion of education, first employment, and the birth of the first child is possible.

Table 3 shows for each sex the distribution of respondents among the various possible sequences of completion of education, first employment, and the beginning of childbearing. For 64% of the women and for 50% of the men, education was completed before the first full-time public sector job was begun. Thus, contrary to what is commonly perceived to be the conventional path of career development, only slightly more than half of the members of each sex completed their education before they began to work. The lower proportion for men than women is partially due to the greater tendency of men than women to accumulate additional education in mid-career.²⁴

Forty-five percent of the women conformed to the conventional path: education, followed by the beginning of work, followed by the beginning of childbearing. However, a substantial proportion of women (22%) bore a child before they completed their highest education. Shortly, I shall investigate whether the sequence of the beginning of childbearing and completion of education affects a woman's working life.

THE NEXUS OF EDUCATIONAL ATTAINMENT AND THE EARLY CAREER

The SIP General Survey interview schedule asked when the respondent began the first job he or she held after completion of highest education. The SIP General Survey interview schedule also asked when the respondent entered the last specialized school he or she attended for at least one year, and when the respondent left that school.²⁵ Over 70%

²⁴We know the year that work began for almost all respondents. For respondents with no specialized schooling, the age at completion of education was estimated as explained earlier. Often the year of completion of schooling, the year work began, and the year the first child was born did not all occur in different calendar years. We do not know for certain what the ordering was of events that occurred in the same calendar year. I have assumed that if the year that two events occurred is the same, that completion of education precedes beginning of work, and that completion of education and beginning of work precede the birth of the first child.

²⁵Recall that specialized schools include all higher educational institutions, specialized secondary schools, and vocational-technical schools.

TABLE 3

Distribution of Sequences of Completion of Education, First Employment, and
Birth of First Child

				Women	Men
<u>Completed Education Before First Employment</u>					
Completed Education	First Employment	First Birth		45.1%	35.4%
Completed Education	First Birth	First Employment		4.2	1.7
First Birth	Completed Education	First Employment		8.3	3.4
Completed Education	First Employment	No Child		6.4	9.8
<u>First Employed Before Completion of Education</u>					
First Employment	Completed Education	First Birth		17.9	19.8
First Employment	First Birth	Completed Education		10.6	19.6
First Birth	First Employment	Completed Education		3.3	3.3
First Employment	Completed Education	No Child		4.3	6.8
TOTAL				100.1%	99.8%
N				(1509)	(1169)

NOTE: People are excluded from this table who never worked or who could not recall the year they first worked or the year their first child was born.

of the respondents attended some kind of specialized school for at least one year. For these respondents, we know the year they began studying at that school and the year they left that school.

The expectation was that even if a person had worked before completing school, he or she would begin a new job after the completion of highest education. However, a surprisingly large proportion of respondents did not complete their education and then commence a new job.

The respondent could have started working at the job held after completing schooling before he or she stopped attending that last school. For example, a graduate student might begin teaching before she had completed all coursework at the university. If the former student continued in the same teaching job after graduation, then she would have begun the first job she held after completing schooling while she was still attending that last school. A white collar worker might enroll in an evening higher educational institution (VUZ) but continue to work at the same job while attending the evening VUZ. If he continued at the same job after completing the work at the evening VUZ, then he would have begun the first job he held after completing his education before he entered that last school. Thus, knowing that a person held a certain job after he or she stopped attending a certain school does not tell us when he or she started that job.

Table 4 shows the distribution by sex of the number of respondents who began the first job they held after completing highest education: 1) after leaving the last school, 2) while attending the last school, or 3) before entering the last school. The distribution is shown with and without those who never attended a specialized school and with and without those who reported no job after completing highest education.

Only 61% of the men with some specialized schooling and 72% of the women with some specialized schooling completed their highest education and then began a new job. Thus, for many respondents, choice of occupational specialty may have led to choice of educational specialty, rather than vice versa.

AGE AT FIRST EMPLOYMENT

The age at which full-time employment starts marks the beginning of the career. In this section, I investigate what factors influence the age at which full-time employment first occurs.

The topic also is interesting because of recent changes in the average age at entry into the labor force in the Soviet Union. By conventional Soviet definition, the "able-bodied ages" begin at age 16 for both men and women. But the average age at actual entry into the labor force has increased over time. In 1959, 60% of the Soviet population age 16-19

TABLE 4

Percentage Distribution of Timing of Leaving Last School and
Beginning First Job After Completion of Highest Education

	All People		People Who Attended a Specialized School	
	Men	Women	Men	Women
Job Started <u>After</u> Leaving Last School	46.2%	51.0%	60.8%	72.1%
Job Started <u>While</u> Attending Last School	13.2	10.4	17.3	14.8
Job Started <u>Before</u> Entering Last School	16.7	9.3	<u>22.0</u>	<u>13.1</u>
No Job After Last Schooling	2.8	5.4		
No Specialized Schooling	<u>21.1</u>	<u>23.8</u>		
TOTAL	100.0%	99.9%	100.1%	100.0%
N	1211	1582	920	1118

were employed, while in 1970, only 40% of those age 16-19 were employed (Breeva 1984: 33).

Educational attainment is certainly likely to influence the age at which a person first worked. Whether a person became a parent before completion of highest education also might affect when that person first worked. For women, birth of a child before completion of highest education might postpone entry into the work force. For men, birth of a child before completion of education might speed entry into the labor force. As being a religious Jew influenced a woman's childbearing, it also is possible that being a religious Jew affected the age that she first worked.

Analysis of the Determinants of the Age at First Employment

Multiple regression analysis is again used to analyze the determinants of the age at which the respondent first worked. Both males and females are considered in the same analysis.²⁶ Dummy variables for educational attainment are again used.²⁷ These educational variables were considered in combination with whether the respondent was female, since the relationship between educational attainment and age that work began might be substantially different for males and females. As earlier, the cohort of birth also is taken into account. Multiple regression results appear in Table 5. A schematic representation of the factors that were found to be important appears in Diagram 2.

Educational attainment is the primary determinant of the age at which respondents first worked. Once educational attainment is taken into account, the sex of the respondent does not matter. Those who completed secondary education entered the labor force three-quarters of a year later than those with less than completed secondary education, and those with at least some higher education entered the labor force almost three and a half years later than those with less than completed secondary education. Having at least some graduate study was related to beginning to work almost four years later than having less than completed secondary education.

Surprisingly, however, delays in the beginning of work for those with higher education are not mainly due to postponement of the beginning of work until all schooling had been completed. Rather, they are due to postponement of the beginning of work because of earlier schooling. Over 50% of those with some higher education first worked before they

²⁶ Preliminary analysis showed that the pattern of relations of variables with age at first work was not distorted by including both sexes in one equation.

²⁷ A more detailed breakdown of educational attainment mattered for age at first work and for the multiple regression analyses in the remainder of the paper than mattered for the number of children ever born to women.

TABLE 5

Multiple Regression Results for Age at First Employment

Variable	B	t	Significance of t
<u>Birth Cohort</u>			
<u>Dummy Variables</u>			
BN1620	1.113609	3.410	.0007
BN2125	1.208444	4.132	.0000
BN2630	-.181214	-.614	.5394
BN3135	-.286667	-.956	.3390
BN3640	-.915518	-3.505	.0005
BN4145	-1.044411	-3.551	.0004
BN4650	-1.000210	-3.874	.0001
BN5155	-1.236149	-4.274	.0000
<u>Educational Attainment</u>			
<u>Dummy Variables</u>			
COMPSEC2	.490599	2.051	.0404
SPECSEC2	1.626378	7.381	.0000
SOMEH2	2.566403	6.935	.0000
COMPH2	3.381919	15.811	.0000
GRADST2	3.717436	9.391	.0000
<u>Dummy Variable for Female and First Birth</u>			
<u>Before End of Education</u>			
FEDBIR1	.933928	4.595	.0000
(Constant)	19.829877	91.387	.0000
$R^2 = .15773$ Adjusted $R^2 = .15308$ Overall F = 33.89519 Significance of Overall F = .0000 N = 2549			

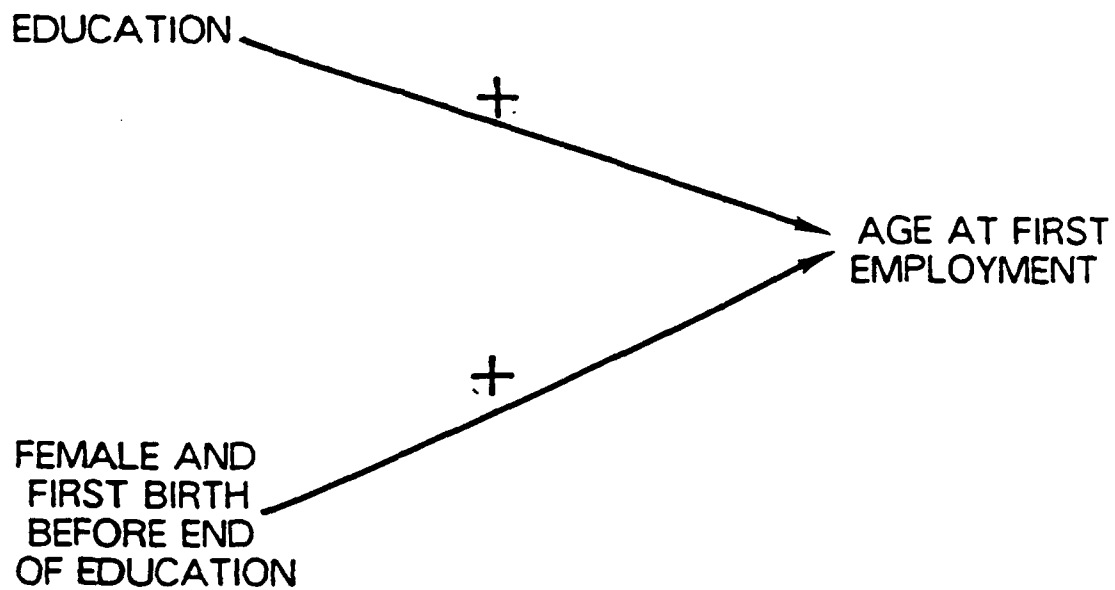


Diagram 2: Schematic Model of Determinants of Age at First Employment, Both Sexes Combined

completed their education, and over 80% of those with at least some graduate study first worked before they completed their education.

For women, birth of a child before completion of highest education led to postponement of entry into the labor force by almost one year. Once cohort of birth and educational attainment have been taken into account, whether a person was a religious Jew did not affect age of entry into the labor force for either men or women. There is no statistical evidence that birth of a child before completion of highest education affected the age at which men began to work.

WORK AFTER REACHING RETIREMENT AGE

Many respondents worked after they reached normal retirement age. Of the 144 men and 411 women interviewed who were past normal retirement age at the end of the LNP, 68% of the men and 53% of the women worked after they had reached retirement age.²⁸

Table 6 shows the average earnings in their last job of people who were past retirement age at the end of the LNP. Some of these people ended their last job before reaching normal retirement age, while others ended their last job after reaching retirement age. For those who worked after reaching normal retirement age, some people continued in a job that they had held before reaching retirement age, while others began a new job after reaching retirement job. Thus, in Table 6, the average earnings in last job is shown for men and women, by whether the last job ended after the respondent had reached retirement age, and, for those who worked after reaching normal retirement age, by whether the last job began before the respondent reached retirement age.

In general, the lowest earnings in last job were received by people who started a new job after reaching retirement age. Women who began their last job after reaching normal retirement age tended to hold manual and lower-level service jobs, such as a museum guard or a coat-check clerk, that often come to mind when one thinks of Soviet retirees working. However, at least among the SIP respondents, most retirement work was not of this type.

²⁸In the Soviet Union, the normal retirement age for women is 55 and for men is 60 years. A woman was classified as having worked after reaching retirement age if she was age 56 or older when she last worked. A man was classified as having worked after reaching retirement age if he was age 61 or older when he last worked. Although some of the elderly took "retirement-type jobs" that they started after reaching retirement age, most continued in their preretirement jobs. Of those who worked after retirement, 90% of the men and 82% of the women began their last job before they had reached retirement age.

TABLE 6

Average Earnings in Rubles per Month in Last Job for People Who Were Past Retirement Age at End of LNP, by When Job Began

	All	Less Than Complete Secondary Education	Complete Secondary Education	At Least Some Higher Education
<u>WOMEN</u>				
No Retirement Job, N=148	118	105	*	125
Retirement Job Begun <u>Before</u> Retirement Age, N=177	136	111	136	146
Retirement Job Begun <u>After</u> Retirement Age, N=38	88	81	*	93
<u>MEN</u>				
No Retirement Job, N=42	187	160	*	193
Retirement Job Begun <u>Before</u> Retirement Age, N=87	196	156	210	220
Retirement Job Begun <u>After</u> Retirement Age, N=10	131	143	*	123

*: Cells with no cases.

The age profile of men and women who work after retirement age differs. Men who worked after retirement age tended to work for only two or three years. The age gradient of leaving work after reaching retirement age is much more gradual for women. For those who worked after reaching retirement age, work was much more discontinuous than work before retirement age.

Twenty percent of the respondents in the SIP General Survey were past retirement age at the end of the LNP. Since the pattern of work and of earnings of those past retirement age is different from that of people before reaching retirement age, it is important that analyses of the career not be misled by assuming that the last job of people who were past normal retirement age is comparable to a preretirement job of a person at the height of his or her career.²⁹

THE COURSE OF THE CAREER

I now examine the continuity of women's work careers. The more years a woman is away from the labor force, either for childbearing or for some other reason, the less experience she gains. In addition, the more discontinuous her career, the less chance she has to build on earlier experience. In the Western literature, lesser job experience and more discontinuous careers, which inhibit obtaining promotions, have been suggested as reasons why women's earnings tend to be lower than those of men of the same age and educational attainment.³⁰

I shall measure the discontinuity of men's and women's work career by the number of years he or she did not hold a public sector job between the year the person first held a public sector job and the end of the LNP. If a respondent was past retirement age at the end of the LNP, I shall examine the number of years he or she did not hold a public sector job between the time the respondent first held a public sector job and the year the respondent reached retirement age.³¹

²⁹See Mincer (1974) for a discussion of the typical pattern of earnings with age in the United States.

³⁰Corcoran (1978) shows for the United States that although lesser job experience and career interruptions play a role in the lower earnings of women, these factors do not account for all of the gap between men's and women's earnings. American women tend to earn substantially less than American men even after education, job experience, and work interruptions have been taken into account.

³¹I estimate the number of years a person did not work by counting the number of years that he or she indicated on the life history chart that he or she did not hold a public sector job for six months or more. To avoid major errors, it is necessary to make some

I expect that men will have taken few years away from public sector employment. Some men will take time off for activities such as additional schooling.³²

Women are likely to take much more time away from public sector employment than men. Most theories predict that the higher a woman's education, the greater her labor force participation, both because she will have more "taste for work" and because her earnings will be greater. Also, the higher her actual earnings, the less time she is likely to spend without a paid job. In addition, the more children she bears, the less she is likely to work for pay, under the assumption that there is some incompatibility between raising children and working. Theories also predict that the higher the husband's income, the less his wife will work, since the higher his income, the more easily they can afford for her not to earn money.

Figure 7 presents information about women's and men's participation in public sector jobs between the time they first held such a job and the end of the LNP (or when they reached normal retirement age, if that occurred before the end of the LNP). It shows the percentage in each cohort that never held a public sector job, the percentage that held a public sector job at some time but were without a public sector job for three years or more between the time they first worked and the end of the LNP, the percentage that was without a public sector job for one or two years between their first job and the end of the LNP, and the percentage that had a public sector job every year from first job through the end of the LNP.

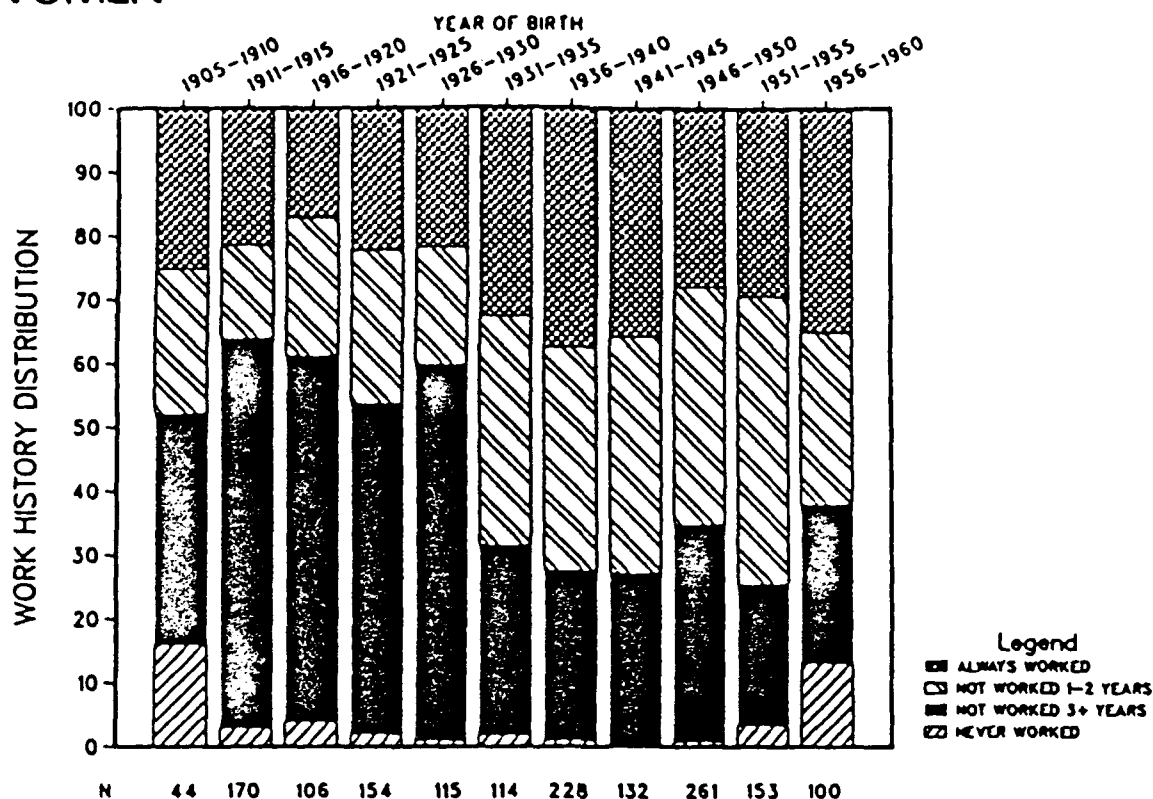
The majority of men had uninterrupted careers. Those who did not have uninterrupted careers tended to take off only one or two years. A substantial proportion of the youngest cohort had never held a public sector job because they were still in school at the end of the LNP.

In contrast, only a minority of women had uninterrupted careers, and a large proportion of those who did not have an uninterrupted career took off three years or more. As for the men, a substantial proportion of the youngest cohort of women had not yet begun to work. Except for the oldest cohort, however, all cohorts of women had only a trivial proportion that had never held a public sector job.

adjustments to the reported data. See Appendix A for more discussion of the life history chart and adjustments to the data.

³² Military service was considered working for pay.

WOMEN



MEN

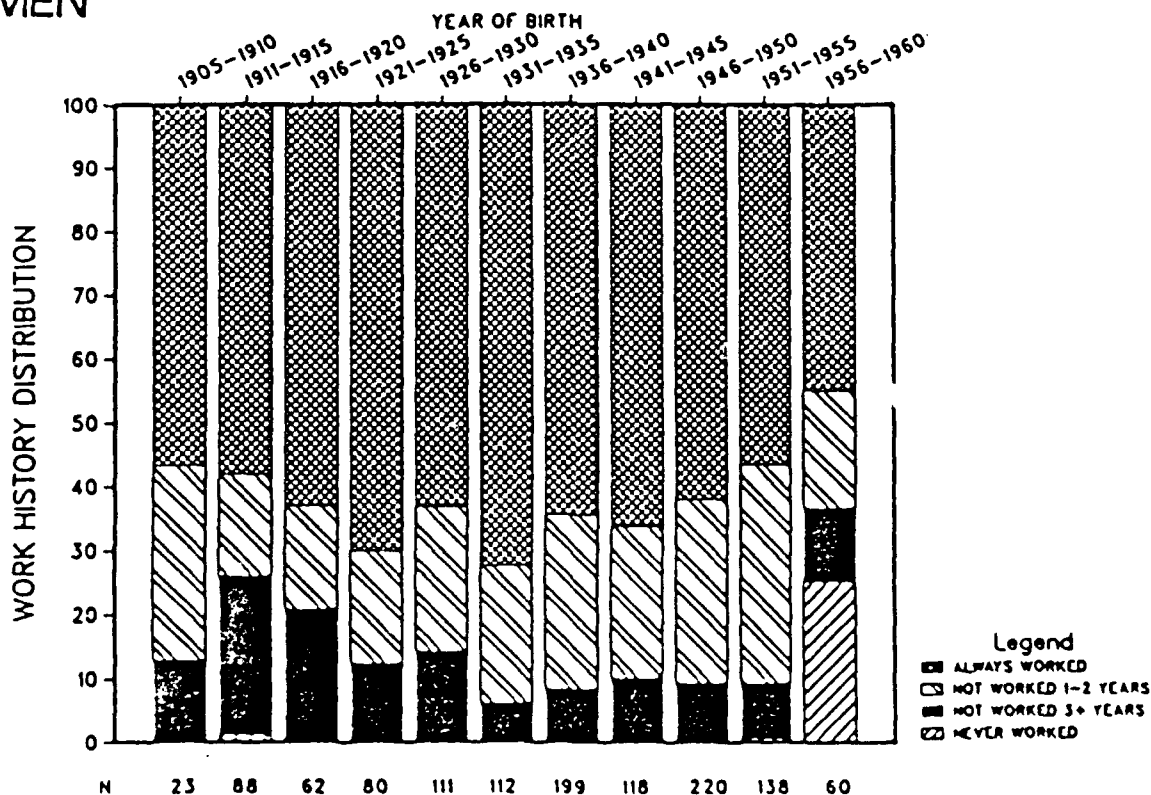


Figure 7: Distribution of Years Not Working from First Job through End of LNP or Retirement: Age

Analysis of the Determinants of the Discontinuity of the Work Career

Next I shall examine the factors related to how many years women did not hold a public sector job between the year they first worked and the end of the LNP or the year they reached normal retirement age, whichever came first. Naturally, cohort of birth must be taken into account. In addition to birth cohort, the most likely influences on the amount of time a woman did not have a public sector job are educational attainment, the number of children ever born, the woman's earnings, and her husband's income.

Although we do not know a woman's earnings at every point in her career, we do know her reported earnings in her first job. Those earnings will be used to indicate how much money she would lose by not holding a public sector job for some time, even though her education gives a general indication of her expected wage rate.

Based on the results of the earlier analysis, I also shall examine whether being a religious Jew or bearing a child before completion of schooling affects the number of years that a woman does not hold a public sector job. Do religious Jewish women have a different labor force participation pattern than other women with the same educational attainment and number of children? Also, does bearing a child before completion of education indicate a disinclination to work, or is there some later "catching up" in increased labor force participation?

Multiple regression analysis is again used. Dummy variables were introduced for having had one child, two children, and three or more children. Dummy variables for educational attainment also are included. Earnings in first job and spouse's earnings from main job at the end of the LNP were entered in rubles per month.³³ The multiple regression results appear in Table 7, and a schematic representation of the important factors appears in Diagram 3.

Educational attainment, whether a child was born before completion of highest education, the number of children ever born, earnings at first job, and husband's LNP earnings all influence the continuity of work. Women with completed general secondary education take one year less away from public sector employment than women with less than completed secondary education.

However, the relation between the number of years without a public sector job and education is not linear. Women with some higher education take more time out than women with completed general secondary education or women with completed specialized education. These women with incomplete higher education may have cut their education

³³The only indicator of the spouse's income is the spouse's earnings from his main LNP job.

TABLE 7

Multiple Regression Results for Number of Years Women Did Not Work
From First Job Through Retirement Age or End of LNP

Variable	B	t	Significance of t
<u>Birth Cohort</u>			
<u>Dummy Variables</u>			
BN1620	-2.407256	-2.022	.0435
BN2125	-5.669074	-5.356	.0000
BN2630	-5.517375	-5.153	.0000
BN3135	-7.327137	-6.999	.0000
BN3640	-8.634785	-8.994	.0000
BN4145	-8.662197	-8.413	.0000
BN4650	-8.425018	-8.684	.0000
BN5155	-8.754299	-8.247	.0000
<u>Educational Attainment</u>			
<u>Dummy Variables</u>			
COMPSEC2	-.963015	-1.276	.2023
SPECSEC2	-2.163525	-3.122	.0019
SOMEH2	-.731461	-.660	.5091
COMPH2	-2.494798	-3.572	.0004
GRADST2	-2.896667	-2.379	.0175
<u>Children Ever Born</u>			
<u>Dummy Variables</u>			
CEB1	.252317	.330	.7412
CEB2	1.444870	1.788	.0740
CEB3	1.920616	1.802	.0719
<u>Dummy Variable for First Birth</u>			
<u>Before End of Education</u>			
EDBIR1	-1.019418	-2.375	.0178
<u>Monthly Earnings in First</u>			
<u>Job in Rubles</u>			
GROSFTJ	-.007578	-2.059	.0398
<u>Spouse's Monthly Earnings in</u>			
<u>Last Job in Rubles</u>			
SPGROSMO	.004937	3.568	.0004
(Constant)	12.019649	9.035	.0000
$R^2 = .25171$		Adjusted $R^2 = .23662$	
Overall F = 16.67730		Significance of Overall F = .0000	
N = 962			

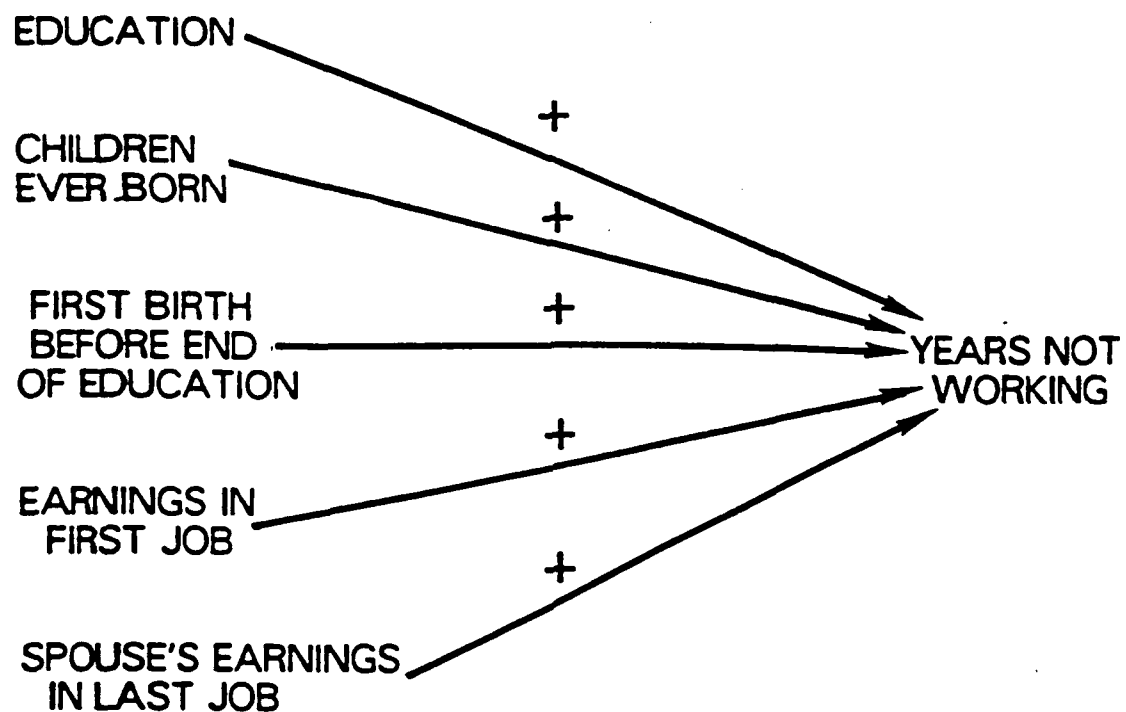


Diagram 3: Schematic Model of Determinants of the Number of Years Women Did Not Work from First Job through Retirement Age or End of LNP

short because of childbearing and may be less inclined to work than otherwise similar women. However, women who have completed higher education spend 2.5 years less without a public sector job than women with less than secondary education.

Women who bore a child before completion of highest education make up for this postponement of the beginning of their career by taking off one year less than otherwise similar women. Thus, bearing a child before completion of education does not indicate a disinclination to work. It only affects the timing of when a woman works.

Most childless women spent some time without a public sector job, but women with one child spent no more time without a public sector job than childless women. Women with two children, however, tended to spend one and a half more years without a public sector job than childless women, and women with three or more children took almost two more years away from public sector work than childless women.³⁴

In recent years, Soviet women have been able to take maternity leave with pay for six months. In addition, if they want to take a longer leave, their jobs are supposed to be held for them for one year without change in job or any harm to their work record. Even so, the Soviet literature suggests that women are concerned about whether taking an entire year's leave due to childbirth will hurt their career, especially if they have not held a given job for very long (Katkova 1978).³⁵ In the SIP General Survey results, we may be observing different labor force behavior after the birth of the first child, when a woman would typically have had little accumulated experience in her job, than after a second or later child, by which time she would have accumulated more experience.

There are additional reasons why women with two or more children may have different labor force participation patterns than women with no children or only one child. Whenever a family makes a change in its living arrangements, such as that related to geographical mobility, the situation is more complicated the more children there are in the family. Women with more children are likely to take more time away from public sector work in association with any change in living arrangements.

³⁴The set of children ever born dummy variables are jointly significant at the .05 level, even though none of the individual dummy variables are significant at that level.

³⁵Respondents in the SIP General Survey would reasonably have replied that they were not without a public sector job if they took six months paid maternity leave, since they were paid during that time, as if they had taken sick leave. If they took less than the full six months of additional unpaid maternity leave, they still would have been less than six months without a public sector job and still would not have reported a work interruption. Thus, the reported work interruptions are fairly major work interruptions.

There also are income effects. The higher a woman's earnings in her first job, the more years she holds a public sector job. Also, the higher the earnings of the husband in his LNP job, the fewer years the wife holds a public sector job.

Even though women who were religious Jews tended to have more children than women who were not religious Jews, once the factors just discussed are taken into account, women who were religious Jews did not spend significantly more time without a public sector job than women who were not religious Jews. Thus, although religiosity did affect childbearing, it did not increase the tendency of women to take time away from public sector work, once their other characteristics, including the number of children they have borne, have been taken into account.³⁶

Analysis of the Determinants of Earnings

In this section, I examine the life course factors that influence earnings in last job. This is done only for people who were not past retirement age at the end of the LNP. The focus is on the explanation of female earnings, but the role of life course factors in the determination of male earnings also will be examined for comparison.

Cohort of birth is again taken into account. It is reasonable to expect that the respondent's earnings in first job would be related to the respondent's earnings in last job before retirement. Educational attainment may have a persistent effect on later earnings, even after earnings in first job is taken into account. The number of years that a woman has actually worked also should affect her earnings in her last job, since the amount of work experience has typically been found to be very strongly related to earnings (Mincer 1974).

The results of the multiple regression analysis for women appear in Table 8.³⁷ A schematic representation of the factors that were found to be important appears in Diagram 4.

³⁶The inclusion of spouse's LNP earnings required that the analysis shown in Table 7 be restricted to women who had a living husband at the end of the LNP. This considerably reduced the sample size. The results when spouse's LNP earnings were not included, and, thus, when women who did not have a living husband at the end of the LNP were included in the analysis, were similar. Only cohort of birth was significantly related to the number of years that a man did not work.

³⁷Earnings in last public sector job held are used to calculate the dependent variable. It includes all bonuses and premiums. Income from a second job or from a private job are not included. One thousand times the natural logarithm of the earnings at the last job in rubles is used as the dependent variable. The logarithm was taken because of the typical curve of earnings with experience, in which with increasing experience, the additional returns in income decrease (Mincer 1974). The natural logarithm was multiplied by one

TABLE 8

Multiple Regression Results for Natural Logarithm of Earnings in
Last Job (x 1000), Women Who Were Not Past Retirement Age at End of LNP

Variable	B	t	Significance of t
<u>Birth Cohort</u>			
<u>Dummy Variables</u>			
BN3135	58.553655	1.270	.2045
BN3640	119.084663	2.842	.0046
BN4145	105.855276	2.083	.0375
BN4650	52.516241	.981	.3271
BN5155	-17.549731	-.278	.7814
<u>Educational Attainment</u>			
<u>Dummy Variables</u>			
COMPSEC2	186.474121	3.657	.0003
SPECSEC2	186.408636	4.064	.0001
SOMEH2	262.200065	3.780	.0002
COMPH2	391.329466	8.732	.0000
GRADST2	676.977092	8.804	.0000
<u>Monthly Earnings in First</u>			
<u>Job in Rubles</u>			
GROSFTJ	2.059740	8.746	.0000
<u>Years Worked</u>			
YRSWK	11.594928	5.080	.0000
(Constant)	4158.467893	54.793	.0000
$R^2 = .24939$		Adjusted $R^2 = .24036$	
Overall F = 27.60509		Significance of Overall F = .0000	
N = 1010			

TABLE 9

Multiple Regression Results for Natural Logarithm of Earnings in Last Job (x 1000), Men Who Were Not Past Retirement Age at End of LNP

Variable	B	t	Significance of t
<u>Birth Cohort</u>			
<u>Dummy Variables</u>			
BN3135	60.834738	1.176	.2397
BN3640	89.159660	1.752	.0802
BN4145	67.604818	1.028	.3040
BN4650	65.144986	.917	.3592
BN5155	-81.072631	-.951	.3419
<u>Educational Attainment</u>			
<u>Dummy Variables</u>			
COMPSEC2	142.879264	2.854	.0044
SPECSEC2	99.878370	2.060.	.0397
SOMEH2	93.228691	1.386	.1661
COMPH2	237.795878	5.163	.0000
GRADST2	390.508384	5.797	.0000
<u>Monthly Earnings in First</u>			
<u>Job in Rubles</u>			
GROSFTJ	.696727	3.537	.0004
<u>Years Worked</u>			
YRSWK	8.335643	2.822	.0049
(Constant)	4749.065326	43.282	.0000
$R^2 = .11118$		Adjusted $R^2 = .09987$	
Overall F = 9.82963		Significance of Overall F = .0000	
N = 956			

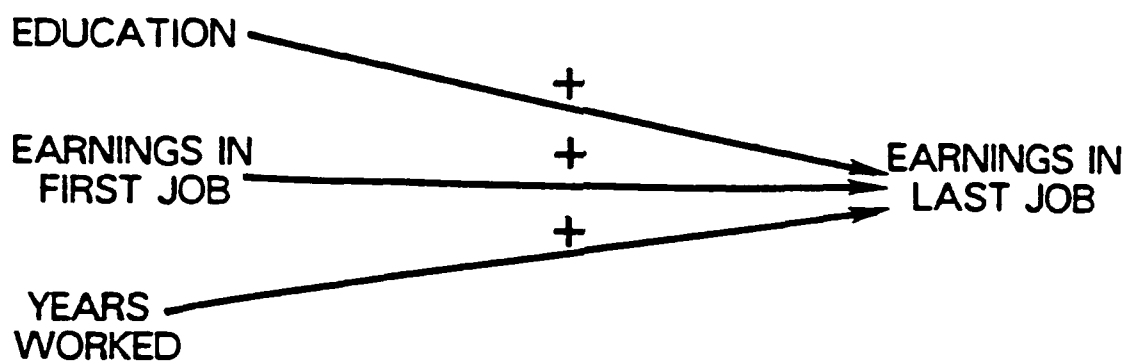


Diagram 4: Schematic Model of Determinants of Earnings in Last Job

Birth cohort, educational attainment, and earnings in first job are all important. In addition, the number of years that a woman has actually held a public sector job is positively related to her earnings in her last job. Once these factors are taken into account, the number of children that a woman has borne does not significantly affect her earnings in her last job. It is particularly interesting that the effects of children on women's earnings all appear to be channeled through their effect on work experience.

Table 9 shows the results of a multiple regression analysis for men, in which the variables appearing in Table 8 (for women) are entered. This set of variables explains less of the variance in men's earnings than it did in women's earnings. This is probably because specific characteristics of the job, such as industry and level of authority, are more important in explaining the variability of men's than of women's earnings. Since men tended to have few years in which they did not have a public sector job, the number of years worked for men is almost totally determined by when they were born and their educational level.

Although the life course variables considered explain less of the variance in men's earnings than in women's earnings, it is surprising how similar the results are for the two sexes. For example, all of the coefficients for individual variables in the multiple regression equations for each sex are of the same sign. Even though the differences in the patterns of relations among variables for men and women required the estimation of a separate equation for each sex, these results suggest that the roles of education, job experience, and earnings in first job are similar in the determination of earnings for both men and women, even though on average women received lower earnings than men.

CONCLUDING REMARKS

I have shown that life course factors are very important in the determination of the labor force participation and earnings of women. Diagram 5 is a schematic representation of the relation of various life events to the number of years women held public sector jobs and to their earnings in their last job.³⁸

I have shown that education is tremendously important for female labor force participation and earnings. The higher a woman's educational attainment, the less time she takes out of the labor force and the higher her earnings, even after work experience and earnings in first job have been taken into account. Education is even more important

thousand to make the coefficients clearer. Analyses in which the actual earnings in rubles were used as the dependent variable yielded very similar results.

³⁸Diagram 5 is not a statistical path model and should not be considered as such.

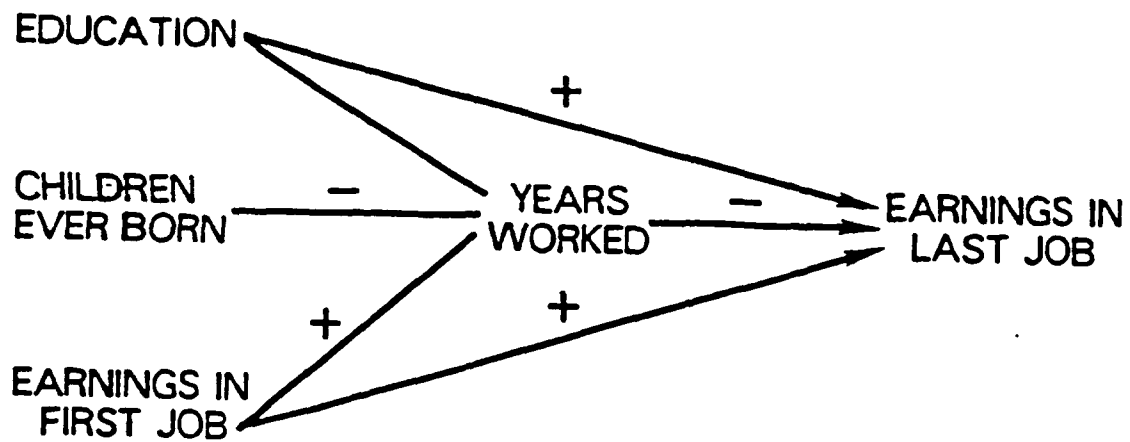


Diagram 5: Schematic Model of Interrelations of Life Course Events for Women

for female labor force participation when one considers its indirect effects through the number of children ever born.

The more children a woman has, the more years she does not hold a public sector job. But once job experience has been taken into account, having children has no further effect on women's earnings. In addition, although women who were religious Jews tended to have more children than women who were not religious Jews, once the number of children is taken into account, religious Jews are no more likely to take time away from public sector employment than other women.

Also, although women who bore a child before completing their education tended to begin to work in a public sector job about one year later than other women, they made up this delay later. These women, on average, took one year less away from public sector employment than otherwise similar women. Thus, childbearing before completion of education only affected the timing of work and did not indicate a distaste for paid work.

What do these results say about the status of Soviet women? That can be answered partially by examining the earnings of women in the SIP General Survey in comparison with the earnings of men in the SIP General Survey. The relation of women's and men's earnings in the SIP General Survey can be compared to the relation of men's and women's earnings in American data, in order to gain some insight into the status of the SIP women in comparison to that of American women.

A major part of the argument about the low status of American women has involved not just the lower average wages of American women but also that for any given set of qualifications, such as education and work experience, American women are paid less than American men. In the United States, one source of the difference in women's and men's earnings is that women hold part-time jobs more often than men. One way to control for the difference in full versus part-time work is to compare earnings of full-time female workers with earnings of full-time male workers.

Table 10 shows women's earnings as a percentage of men's earnings only for men and women who worked full-time (35 hours or more) for both the SIP General Survey respondents and for Americans in 1979 (U.S. Bureau of the Census 1981: 224-228). The table begins at age 25, since education often interferes with full-time work before that age. The table ends at age 55, since that is the normal retirement age for Soviet women. For those categories in which the female/male ratio in earnings is higher in the SIP General Survey than for the United States in 1979, the value in the top panel of Table 10 is underlined.

Overall, women in the SIP General survey age 25-54 who worked full-time made 70.1% as much as men, while for American women in 1979, the comparable percentage

TABLE 10

Women's Earnings as a Percentage of Men's Earnings by
Age and Education for Full-Time Workers,
SIP General Survey and United States, 1979

EDUCATION				
Age	Less than Completed Secondary	Completed Secondary	Some Higher or More	Overall
- SIP GENERAL SURVEY -				
25-29	*	54.8%	78.5%	66.1%
30-34	*	68.9	72.8	69.3
35-39	49.0	81.9	75.9	76.3
40-44	63.2	71.0	82.3	76.1
45-49	69.0	59.1	67.3	66.5
50-54	67.3	59.1	74.0	62.3
Overall	63.7%	66.1%	75.6%	70.1%
- UNITED STATES, 1979 -				
25-29	*	65.8%	73.4%	70.4%
30-34	*	59.5	64.7	61.4
35-39	60.5	54.2	54.0	53.2
40-44	58.0	54.4	50.9	51.9
45-49	56.6	54.4	49.0	51.5
50-54	52.1	54.7	50.8	52.1
Overall	57.6%	57.4%	57.3%	56.8%

*Results not presented because of small number of cases.

**The values for the SIP data are undelined when the percentage is higher than the corresponding percentages for the United States, 1979.

was 56.8%. The overall breakdown by education shows that within every education category, the women in the SIP General Survey had earnings that were a larger proportion of the earnings of men in the SIP General Survey than American women's earnings were of earnings by American men in 1979. In the breakdown by age, the SIP women fared better than the American women for all age groups except the youngest, those 25-29. In the cross-tabulation of age by education, the SIP women fared better in every classification except for young women with fairly low education.³⁹

The SIP data suggest that Soviet women, like American women, earn less than men, and that the earnings differential by sex is not totally eliminated by controlling for characteristics such as age, education, and hours worked. However, in general, the differential between female and male earnings is not as great for the SIP respondents, and therefore possibly also for the Soviet European population in cities, as in the United States.

³⁹In both the SIP and the American data, there were few people under age 35 who had less than completed high school education. Thus, the values for those age 25-29 and 30-34 with less than completed secondary education are not presented, although their earnings are included in calculation of the marginal values by age and by education.

APPENDIX A. Determination of First and Last Work

The data for studying the timing of labor force participation come from a life-history chart. On this chart one space appears for every year since the early twentieth century. The respondent was to place an "X" in the box pertaining to each year since reaching age 18 in which he or she did not have a public sector job for at least six months.

Examination of the results indicated that respondents recorded gaps in their employment accurately, but they sometimes did not place an X in boxes for years before they ever started to work, such as before finishing school, nor for years after they stopped working, especially if they had been retired for many years.

All years before the first job and all years after the end of the last job were coded as indicating that the respondent was not working. In addition, those respondents who indicated that they had never held a public sector job were coded as having not worked in every year. Four respondents clearly had worked, but could not recall when they had begun their last job nor when they had ended it. Hence, the life history data for these four respondents was coded as missing.

All respondents were asked when they began their first job after completion of highest education. Respondents who completed their education at age 26 or older also were asked when they had their first full-time job, if they had one before completion of education. The first reported job was coded as first job — after completion of education for those who completed their education before age 25 and whatever was reported as first job for those who completed their education after age 25.

References

- Anderson, Barbara A. 1986a. Cultural Factors in the Decline of Fertility in Europe. In Susan Cott Watkins and Ansley J. Coale, eds. The Decline of European Fertility. Princeton: Princeton University Press (in press).
- Anderson, Barbara A. 1986b. Marriage, Family, and Fertility in Russian and Soviet Censuses. In Clem, ed. (in press).
- Anderson, Barbara A. and Brian D. Silver. 1985. Estimating Census Undercount from School Enrollment Data: An Application to the Soviet Censuses of 1959 and 1970. Demography 22 (May): 289-308.
- Baldwin, Wendy H., and Christine Winquist Nord. 1984. Delayed Childbearing in the U. S.: Facts and Fictions. Population Bulletin, Vol. 39, No. 4 (November), Population Reference Bureau.
- Becker, Gary S. 1960. An Economic Analysis of Fertility. Demographic and Economic Change in Developed Countries. Universities-National Bureau of Economic Research Series 11, Princeton: Princeton University Press.
- Belova, V. A. 1971. Velichina sem'i i obshchestvennoe mnenie [The number of children and social attitudes]. In Volkov, ed., pp. 35-51.
- Belova, V. 1973. Differentsiatsiia mneniia na zhlutshem i ozhidaemom chisle detei v sem'e [Differences in attitudes toward the ideal and the intended number of children in the family]. Vestnik statistiki, No. 7: 27-36.
- Belova, V. 1975. Chislo detei v sem'e [The number of children in the family]. Moscow: Statistika.
- Breeva, Ie. B. 1984. Naselenie i zaniatost' [Population and employment]. Moscow: Finansy i statistika.
- Bumpass, Larry. 1973. Is Low Fertility Here to Stay? Family Planning Perspectives 5 (March/April): 67-69.
- Butz, William P., and Michael P. Ward. 1979. The Emergence of Countercyclical U. S. Fertility. American Economic Review 69 (3): 318-328.
- Coale, Ansley J. 1973. The Demographic Transition Reconsidered. International Population Conference, Liege, 1973. Liege: International Union for the Scientific Study of Population: 53-72.
- Coale, Ansley J., Barbara A. Anderson, and Erna Harm. 1979. Human Fertility in Russia Since the Nineteenth Century. Princeton: Princeton University Press.
- Corcoran, Mary. 1978. The Structure of Female Wages. American Economic Review 68 (May): 165-185.

- Duncan, Otis Dudley, David L. Featherman, and Beverly Duncan. 1972. Socioeconomic Background and Achievement. New York: Seminar Press.
- Elder, Glenn H., Jr., ed. 1985. Life Course Dynamics. Ithaca: Cornell University Press.
- Feshbach, Murray, and Stephen Rapawy. 1973. Labor Constraints in the Five-year Plan. Soviet Economic Prospects for the 1970s. U. S. Congress, Joint Economic Committee. Washington, D.C.: Government Printing Office, pp. 485-563.
- Feshbach, Murray, and Stephen Rapawy. 1976. Soviet Population and Manpower Trends and Policies. Soviet Economy in a New Perspective. U.S. Congress, Joint Economic Committee. Washington, D.C.: Government Printing Office, pp. 113-154.
- Gronau, Reuben. 1973. The Effect of Children on the Housewife's Value of Time. Journal of Political Economy 81 (March/April): 200-233.
- Gustavus, Susan O., and Charles B. Nam. 1970. The Formation and Stability of Ideal Family Size Among Young People. Demography 7 (1): 43-51.
- Iankova, Z.A., E. F. Achil'dieva, and O. K. Loseva. 1983. Muzhchina i zhenshchina v sem'e [Men and women in the family]. Moscow: Finansy i statistika.
- Katkova, I. 1978. Materinskii ukhod za novorozhdennym [Maternal care of a newborn child], In Valentei, ed., pp. 38-46.
- Kiseleva, G., and I. Rilkova. 1974. O motivakh ogranicheniia rozhdaemosti [About motives for the limitation of fertility]. In Valentei, ed., pp. 55-71.
- Knodel, John, and Etienne van de Walle. 1979. Lessons from the Past: Policy Implications of Historical Fertility Studies. Population and Development Review 5 (2): 217-245.
- Lesthaeghe, Ron J. 1977. The Decline of Belgian Fertility, 1800-1970. Princeton: Princeton University Press.
- Livi-Bacci, Massimo. 1971. A Century of Portuguese Fertility. Princeton: Princeton University Press.
- Michael, Robert T. 1973. Education and the Derived Demand for Children. Journal of Political Economy 81 (March/April): 128-164.
- Mincer, Jacob. 1974. Schooling, Experience, and Earnings. New York: National Bureau of Economic Research.
- Rimashevskaiia, N. M., and S. A. Karapetian, eds. 1985. Sem'ia i narodnoe blagosostoianie v razvitom sotsialisticheskom obshchestve. [Family and popular wellbeing in a developed socialist society]. Moscow: Mysl'.
- Shakhot'ko, L. P. 1975. Rozhdaemost' v Belorussii [Fertility in Belorussia]. Minsk: Nauka i tekhnika.
- Sisenko, V. 1974. Differentsiatsiia rozhdaemosti v krupnom gorode [Differential fertility in very large cities]. In Valentei, ed., pp. 30-44.

- Sweet, James A. 1977. Demography and the Family. In Annual Review of Sociology, Volume 3. Palo Alto: Annual Reviews, Inc.
- Turchi, Boone A. 1975. The Demand for Children: The Economics of Fertility in the United States. Cambridge: Ballinger.
- U.S. Bureau of the Census. 1981. Money Income of Families and Persons in the United States: 1979. Current Population Reports, Series P-60, No. 129, Washington, D.C.: U. S. Government Printing Office.
- U.S. Bureau of Labor Statistics. 1985. Handbook of Labor Statistics. Washington: U. S. Government Printing Office.
- Valentei, D. I. 1974. Demograficheskii analiz rozhdaemosti [Demographic analysis of fertility]. Moscow: Statistika.
- Valentei, D. I., ed. 1978. Zhenshchiny na rabote i doma [Women at work and at home]. Moscow: Statistika.
- Volkov, A. G. 1971. Faktory rozhdaemosti [Factors in fertility]. Moscow: Statistika.
- Volkov, A. G. 1977. Izmenenie polozheniia zhenshchiny i demograficheskoe razvitie sem'i [Changes in the status of women and the demographic development of the family], In Volkov, ed., pp. 43-52.
- Waite, Linda J. 1981. U. S. Women at Work. Population Bulletin. Vol. 36, No. 2 (May), Population Reference Bureau.
- Westoff, Charles F. 1978. Some Speculations on the Future of Marriage and the Family. Family Planning Perspectives, Vol. 10 (March/April): 79-83.
- Westoff, Charles F. and Raymond H. Potvin. 1967. College Women and Fertility Values. Princeton: Princeton University Press.
- Willis, Robert. 1973. A New Approach to the Economic Theory of Fertility Behavior. Journal of Political Economy 81 (March/April): S14-64.

Chapter Eight

Productivity, Slack and Time Theft in the Soviet Economy

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ACKNOWLEDGEMENT

The author would like to thank Joseph Berliner, Janet Chapman, and Gregory Grossman for their comments and suggestions. I would also like to thank my colleagues Irwin Collier and Janet Kohlase for their assistance. The weaknesses and errors that remain are the sole responsibility of the author.

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INTRODUCTION

This study uses eyewitness accounts of former Soviet workers and employees as an unconventional source of information on Soviet enterprise operations. The Soviet Interview Project (SIP) collected information in 1983 and 1984 from approximately 2,900 former Soviet citizens who reported on the jobs they held at the end of their last "normal" period of life in the Soviet Union. For the vast majority of respondents, the end of this last normal period was 1978 or 1979. Soviet Interview Project respondents were asked a number of factual and perception questions concerning the Soviet work place. They were asked to assess productivity (whether it was rising or falling and the reasons why), their perception of the amount of labor slack and the seriousness of supply shortages, and their views on specific enterprise problems such as alcoholism, absenteeism, information flows, and worker apathy. They also responded to questions on dismissals and career advancement within the firm. Respondents were asked a wide range of factual questions concerning their primary job, second job, private economic activity, and time spent on personal business during work hours.

This paper focuses attention on several issues. The first is how Soviet workers, as eyewitnesses at the firm level, assessed Soviet enterprise operations in the late 1970s. How do Soviet workers evaluate labor productivity, labor redundancy, alcoholism, apathy, and supply disruptions in their enterprises? The second issue is: What types of Soviet enterprises are systematically described as poor performers? What are the enterprise characteristics by branch, operating rules, and other features that

eyewitnesses associate with poor performance? The third issue is the effect of specific operating characteristics of Soviet enterprises on the behavior of workers and employees? Do respondents who work in enterprises with one set of operating arrangements (such as merit advancement and few dismissals) behave differently from those who work in enterprises with different operating arrangements?

The picture of the Soviet enterprise that emerges from respondent descriptions is of interest in its own right. The official Soviet literature, which focuses on formal organization and operating procedures, provides few glimpses into the routine functioning of Soviet enterprises. The Western literature on the Soviet enterprise, on the other hand, is based upon accounts of a limited number of expert-informants (describing an earlier period) and on anecdotal accounts from the Soviet press.¹ A relatively large sample of micro respondents could either confirm or refute the stereotypic view of Soviet enterprise operations found in the literature. Anecdotal accounts can establish only the existence of supply disruptions, overstaffing, alcoholism, time theft, second economy jobs, worker absenteeism, and so forth. Unlike a large sample of micro respondents, anecdotal information cannot reveal the relative frequencies of such phenomena in routine enterprise operations.

Eyewitness reports represent a potential new source of information on the Soviet enterprise. The challenge is to use the material in a systematic, analytical fashion to understand Soviet resource allocation practices. Traditionally, Western economists have evaluated Soviet working arrangements either by examining aggregate outcomes (such as relative GNP growth or productivity growth) or by studying specific

operating arrangements (such as the wage system, managerial bonuses, or procedures for allocating capital). Abram Bergson, for example, has attempted to isolate those Soviet operating arrangements for materials planning, capital allocation, and labor markets that contribute to economic inefficiency.² Joseph Berliner and David Granick have investigated Soviet managerial practices in the same light.³ Padma Desai and Ricardo Martin and Judith Thornton have even attempted to place inefficiency price tags on Soviet working arrangements.⁴ A number of problematic Soviet working arrangements -- storming, inefficient investment allocation rules, ratchet effects, overcommitment of construction funds, labor hoarding -- have been identified, and they are typically offered as the causes of lagging Soviet growth and deteriorating productivity performance.⁵

The use of microeconomic eyewitness accounts to study Soviet enterprise working arrangements is novel. The average respondent is not an expert on the Soviet enterprise. Rather the respondent is simply an observer of the very limited range of Soviet reality reflected in his or her former enterprise or working group. In fact, the average respondent's description of the Soviet enterprise may conflict with that of an expert from the same enterprise, such as a manager or chief accountant. The worker, operating from the restricted vantage point of limited personal observation, may have a different view of supply disruptions, alcoholism, or absenteeism than the manager, who has a better overview of enterprise operations.

Generally speaking, experts (managers, chief accountants, chief engineers, etc.) are a richer source of information on enterprise

operations. Non-experts, nevertheless, can provide valuable insights for a number of reasons. First, the number of expert-informants on Soviet enterprises among an emigre population is limited.⁶ Researchers who deal with experts must generalize from a small number of reports and are unable to sort out the effects of different enterprise characteristics. Statistical inference can be applied to large samples of non-experts to study the effects of enterprise characteristics (such as dismissals for poor work or merit advancement) on enterprise performance. Second, non-experts should be able to identify obvious enterprise problems. If a high proportion of workers either failed to report to work every Monday or reported intoxicated, the non-expert eyewitness could scarcely fail to notice. The average respondent would have observed if a high proportion of work days were spent idle because supplies were not available.

A third reason for using non-expert testimony is that non-expert eyewitnesses can provide, in a number of instances, highly accurate information about enterprise operations. In a world of costly information, Soviet workers (like their Western counterparts) would specialize in the information of immediate relevance to them. They would be familiar with the wage and bonus system, criteria for advancement, and sanctions for poor work. Although one could question the reliability of non-expert responses on some enterprise-wide questions (like overall productivity performance), non-experts should be able to provide accurate testimony on phenomena close to their own jobs.

Ideally, information from both non-expert observers and expert-informants should be combined to study Soviet enterprise operations. Ongoing special studies, supported by the Soviet Interview

Project, have already provided some expert studies of enterprise operations that ask similar questions of expert-informants.⁷ At this juncture, it is too early to compare the results that emerge from small-scale expert and large-scale non-expert studies of the Soviet enterprise.

THE SOVIET INTERVIEW PROJECT QUESTIONNAIRE

Introduction

SIP respondents were asked questions that cast them in the role of observers of enterprise working arrangements. They were also asked questions concerning their own personal experiences and backgrounds, questions that allow us to study the effects of respondent characteristics on descriptions of enterprise working arrangements. Background can affect responses because people with different backgrounds have different work experiences and because background characteristics may determine whether the respondent is an expert or non-expert informant.

Labor Productivity

Respondents who reported working during their last period of normal life in the Soviet were asked directly about their perceptions of labor productivity in the Soviet Union. Specifically respondents were asked:

It has been said that the productivity of labor in the Soviet union has been declining over the years. From your own experience during your last normal period, would you say that was true or not?

For those respondents answering affirmatively, an open-ended question

was asked:

In your opinion, why was the productivity of labor declining?

Interviewers automatically probed to determine if respondents wished to give more than one reason. Respondents who volunteered more than one reason were asked to identify the main reason for the productivity decline.

These questions must be interpreted carefully for several reasons. First, the extent to which responses are based upon the respondent's own work experiences is uncertain. Although respondents were asked to base their answers on their "own experience," they could have generalized from conversations, press reports, or other second-hand sources. Fortunately, this is an empirical issue: systematically different responses, by type of enterprise for example, would indicate that respondents had indeed answered on the basis of their own work experience. Second, it is not clear what an affirmative response to the "declining productivity" question actually means. The concept of productivity is inherently complex. The question asks specifically about declining labor productivity, a rare economic phenomenon, not about a declining rate of growth of labor productivity. It was feared that respondents would be confused by a question about declining rates of growth, and more simple but technically-inexact language was chosen. The conservative interpretation is that affirmative responses are meant to signify sub par labor productivity performance as judged by some subjective productivity standard. The exact magnitude of the perceived productivity problem cannot and should not be read from affirmative responses, although Soviet

respondents appear to understand the meaning of labor productivity.⁸

The respondent's volunteered explanation of the causes of "declining productivity" offers an unusual source of information on the unexplained productivity residual. Although growth accounting specialists have tried to penetrate the residual, their attempts have been based on guesswork and intuition.⁹ In the absence of reliable conventional methods, unconventional information, such as eyewitness assessments, offers a new opportunity to study the residual.

Labor Redundancy

SIP respondents were asked to report on the amount of labor slack they observed at their place of work:

On your last job, do you think it would have been possible to fulfill the plan with fewer workers and employees, or would it have not been possible?

For those (with a plan) who answered affirmatively, a follow-up question was asked:

How many workers and employees do you think were really needed to fulfill the plan?

On your job, could you have met the targets with X% fewer workers?

Respondents were started with the plan that could be fulfilled with 5% fewer workers, and were allowed to build up to plan targets that could be

fulfilled with 50% fewer workers.

These questions on labor redundancy force the respondent to speak directly about personal workplace experiences, so there is less danger of second-hand generalizations. The labor slack questions address productivity only indirectly because respondents are asked to assess labor redundancy in terms of assigned plan targets. If an unrealistic target is set for the firm, and the respondent answers that there was no slack, this does not mean that the enterprise was operating more efficiently (in the economist's sense of the term) than one that was assigned easy targets and operating with slack. The question does, however, get at the issue of labor utilization, an important component of labor productivity.

The labor redundancy question addresses the issue of "hidden labor reserves" in the Soviet economy. The literature has argued that Soviet managers tend to accumulate excess labor (to insure against future plan increases) and that there is little incentive for managers to fire redundant workers. In fact, Soviet authorities have sanctioned a series of economic experiments that encourage managers to dismiss redundant workers.¹⁰ From these writings, one would expect widespread reportings of redundant labor staffing. The relatively large SIP sample provides an important opportunity to transcend anecdotal information on labor redundancy and to calculate relative frequencies.

Enterprise Working Arrangements

The SIP questionnaire asks a series of questions on enterprise operations. Respondents were asked to describe observed job-related problems (whether they typically had enough information to do their job well, whether they had sufficient equipment and supplies, whether they

were given an opportunity to use their specialty, whether they could influence supervisor decisions that affected them, and the extent to which alcoholism and absenteeism were a problem),¹¹ the factors that were most important for career advancement at their place of work,¹² whether "workers who performed poorly" were fired and how regularly, and whether the party committee and the trade union made things better or worse at their place of work.¹³

These questions allow respondents to make observations about routine enterprise operations. By asking respondents to assess problems such as alcoholism, lack of supplies, failure to use worker specialties, etc., we can learn something about the relative frequencies of problems that have been identified as widespread by the anecdotal evidence. The question on merit advancement sheds light on an important aspect of enterprise operations. Presumably a merit-based advancement system is more conducive to efficient enterprise operations than other arrangements. The questions on trade union and party intervention gives respondents the opportunity to rate the work of key organizations that supplement enterprise decision making. The available literature does not allow us to judge whether the interventions of the party organization or the trade union help or hurt enterprise operations.¹⁴ With the exception of the party and trade union questions, these are issues with which the average respondent should be reasonably well informed.

Descriptive Statistics

Table 1 presents the frequency distributions of responses. It reveals that the overwhelming majority of respondents (74.5 percent) felt that productivity was declining. Over 60 percent cited problems related to

material incentives (lack of incentives, unavailability of consumer goods, bad living conditions) as the main cause of declining productivity. Ten percent felt that alcoholism and another 10 percent cited worker apathy or laziness as the main cause of declining productivity. Slightly over 8 percent felt that poor management was responsible for declining productivity. **[Note: Table 1 about here]**

Roughly one half (47 percent) of those who had a plan reported that the plan could not have been fulfilled with fewer workers. Almost one half (49 percent) felt the plan could have been fulfilled with 5 percent fewer workers. Twenty two percent of respondents reported the plan could have been fulfilled with 20 percent fewer workers, and 11 percent felt that the plan could have been fulfilled with 50 percent fewer workers.

Slightly more than 15 percent (16.2 percent) reported that they rarely or never had sufficient supplies or equipment to do their jobs. One third felt that alcoholism and absenteeism were problems nearly all the time or often. The vast majority felt that they had enough information to do their jobs well and that they were allowed to work in their specialty.

Forty percent of respondents cited merit factors (higher education, knowledge and experience, organizational ability) as the most important criteria, for job advancement. Forty five percent cited party membership, protection, and connections as the most important job advancement criterion, and 11 percent cited getting along with superiors.

The majority of respondents (52 percent) felt that the party committee had no effect on output, although a significant minority (33 percent) felt that the party committee made things better. An even larger majority felt that the trade union had no effect on wages (72 percent), although one

quarter felt that the trade union made things better. Similarly, 62 percent felt that the trade union had no effect on worker welfare, but more than one third (37 percent) reported that the trade union had a positive effect on worker welfare.

These frequency distributions show the raw material upon which this study is based. Several of the results reported in Table 1 are interesting in their own right: First, SIP respondents do not report alarming problems with insufficient supplies and equipment. Almost 70 percent felt that they "often or nearly all the time" had sufficient supplies and equipment to do their jobs. Only 16 percent reported insufficient supplies and equipment to be a chronic problem. This result does not jibe well with the stereotypic picture of the Soviet enterprise as being plagued by constant supply problems. Second, SIP respondents confirm that alcoholism and absenteeism are serious but not overwhelming enterprise problems. One third report alcoholism and absenteeism to be a problem "often or nearly all the time," but a higher proportion (40 percent) say that alcoholism and absenteeism were rarely or never problems. Third, SIP respondents do not report significant amounts of redundant labor. Sixty five percent felt that the plan could not have been fulfilled with a 10 percent reduction in work force, and one half (47 percent) felt that there were no redundant workers at their place of work. Fourth, there is a roughly even split on the importance of merit and non-merit factors in job advancement. Fifth, although the majority of respondents felt that the party committee and the trade union made no difference, a significant minority felt they played positive roles in the Soviet enterprise.

ANALYSIS OF RESULTS

The frequency distributions of Table 1 are only the first step in analyzing the working arrangements of Soviet enterprises. The enterprise characteristics that are significantly related to enterprise outcomes can be isolated analytically using multiple regression. Ordinary least squares is used in this paper when the dependent variable is not dichotomous, and logit regression is applied to dichotomous dependent variables. Logit regression is suitable for capturing the factors that affect the probability of a respondent belonging to a specific dichotomous category. The logit functional form has convenient properties for dealing with dichotomous categories: the predicted value of the dependent variable must be between zero and unity (negative probabilities or probabilities greater than one are ruled out), the functional form is nonlinear (S-shaped) at the boundaries, and the probability coefficients depend upon the values of the exogenous variables. The logit regressions reported in this paper are estimated using a maximum likelihood convergence procedure.¹⁵

Productivity Assessments

Figure 1 classifies respondents who felt that "productivity has been declining over the years" by the number of subordinates they supervised. The number of people supervised at the work place is not a perfectly reliable measure of the level of supervisory responsibility and hence of

the "expertness" of the eyewitness. Some high-level respondents could have reported only the number of immediate supervisees, while foremen reported the total number of workers in their production unit.

Postinterview analysis suggests, however, that the number of people supervised is a reasonable (but rough) approximation of level of supervisory responsibility.¹⁶

The classification of respondents by level of supervisory responsibility provides a rough reliability check on responses. More highly placed respondents could provide more reliable assessments of enterprise productivity. If the responses of low-level and high-level respondents are not systematically different, credence is added to the testimony of low-level respondents. The net gains are that the sample size is expanded considerably and that productivity assessments are the same at different vantage points within the enterprise. Figure 1 shows that 74 percent of the respondents answered that Soviet productivity was declining, and the percentages do not appear to vary systematically with the level of supervisory responsibility. Respondents at different levels in the firm's hierarchy are in basic agreement on the matter of poor productivity performance. [Note: Figure 1 about here]

We interpret a report of declining productivity as a perception of productivity "problems" or of poorly managed resources. Respondents could have based their answers on personal observations from their place of work or they could have generalized from experiences outside their immediate work experience. Respondents who used immediate work

experience would be more valuable because, knowing the characteristics of their enterprise, we could isolate those enterprise characteristics which contribute systematically to productivity problems. In a sense, responses based upon personal work experiences allow us to learn something about the characteristics of poorly run enterprises in the Soviet Union.

Whether respondents answered the productivity question on the basis of actual work experience can be tested empirically. Responses based on actual work experience should be systematically related to enterprise characteristics. Responses based on other experiences would either be randomly distributed or would be associated with personal characteristics such as age, sex, marital status, and so on.

A logit regression of enterprise and respondent characteristics on reportings of "falling productivity" is presented in Table 2. The dependent variable is "one" if the respondent reports "declining productivity" and zero otherwise. A positive significant coefficient means that the exogenous variable raises the probability of reporting declining productivity. [Note: Table 2 about here]

A number of enterprise characteristics - branch (BRANCH), whether poor workers were fired (PINKSLIP), whether supply shortages (SUPPLYPROB) or alcoholism/absenteeism (ALCOHOL) were frequent problems, whether job advancement was based on merit (MERIT) - are included as exogenous variables to capture the impact of the enterprise work experience on the productivity assessment. Respondent

characteristics - sex (FEMALE), age (AGE), supervisory responsibilities (SUBORD), and educational attainment (HIGHED) - are included for two reasons: First, if respondents answer on the basis of nonwork experiences, these responses may be systematically related to personal characteristics. Personal characteristics determine the after-work information environment in which the respondent lived. Second, even if respondents answer on the basis of work experience, respondents with different personal characteristics (such as more education) occupy different positions within the same enterprise and thus may assess productivity differently. Although our prime interest is the enterprise characteristics that contribute to poor productivity performance, other factors must be held constant to have a complete model specification.

Table 2 shows that respondents who worked in enterprises where job advancement was based on merit were less likely to report falling productivity. Respondents who worked in enterprises in which poor workers were fired were more likely to report falling productivity. Enterprises with serious supply problems ("rarely or never had sufficient supplies/equipment") were more likely to be reported as experiencing productivity problems, although the statistical significance of this result is ambiguous. Surprisingly, enterprises with serious alcoholism/absenteeism problems did not have significantly higher reportings of productivity problems. The branches of the economy in which respondents were more likely to report falling productivity (with manufacturing productivity as the reference point) are construction,

municipal economy and housing, science, and education.

Respondent characteristics also systematically affect productivity assessments. In particular, women and older respondents were more likely to report falling productivity than male respondents and young respondents. More highly educated respondents, however, did not differ systematically in their productivity assessments. It should be emphasized that personal characteristics are included principally to avoid specification error; these results are not of immediate interest in their own right. It is surprising, however, that older respondents systematically give more negative productivity assessments than their younger cohorts. This finding goes against the general pattern encountered by SIP researchers who find that older respondents generally tend to give a more optimistic assessment of Soviet economic life than their younger cohorts.¹⁷

Most of the above results confirm a priori expectations. Enterprises in which advancement is based upon merit would be expected to receive better productivity ratings, and they indeed do. That enterprises with frequent supply problems are associated with productivity problems comes as no surprise. It is also not surprising that construction and housing, branches often singled out for criticism in the Soviet press, are identified as experiencing productivity problems. The high frequency of "falling productivity" reports from respondents in science and education - service branches in which it is conceptually difficult to estimate productivity - shows that Soviet science and education are perceived as

functioning inefficiently relative to other branches. Notably, respondents fail to single out health care as a troubled-productivity sector contrary to Western criticism of the "failing" Soviet health care sector. ¹⁸

These results do not lend support to the proposition that Soviet productivity problems are due in a significant manner to human factors such as alcoholism and worker absenteeism. ¹⁹ Enterprises designated as having frequent alcoholism/absenteeism problems do not have a significantly higher incidence of poor productivity ratings.

The positive coefficient on the PINKSLIP (poor workers usually fired) variable seems to suggest that the discipline imposed by the threat of firing does not raise productivity. Instead, enterprises in which poor workers were "usually fired" have a higher frequency of reports of declining productivity. These findings seem to suggest that, while the "carrot" of merit advancement does have a positive effect on enterprise productivity, the "stick" effect of threatened firings has a perverse effect. We would not rule out that the positive coefficient is due to reverse causality (enterprises with more bad workers are forced to do more firing). However, the frequency of alcoholism/absenteeism is being held constant (a proxy for bad workers), so it is likely that this is truly a perverse result.

Reasons Productivity Declining

Respondents who reported that productivity was declining were asked

the main reason for this decline. As Table 1 showed, the reasons advanced fall into five general categories (in descending order of importance): incentive and pay problems (low pay, poor housing, bad working conditions, worker disappointment), bad workers (alcoholism, absenteeism, apathy, laziness), poor management, resource deficiencies (lack of sufficient workers, poor technology), and the economic system. To some degree, these categories can overlap. Absenteeism and apathy may be the consequence of lack of incentives. Poor management may ultimately be the consequence of the economic system. Thus the dividing lines could be questioned.

Because the reasons for declining productivity do not fall into ready dichotomous categories, multiple regression is not a convenient tool for determining the enterprise characteristics that yield particular response categories.²⁰ Simple cross-classifications of the reasons for declining productivity by specific respondent and enterprise characteristics do, however, point to some explanatory factors.

Figure 2 gives the reasons for declining productivity by the number of persons supervised (none, 1-10, more than 10).²¹ As noted above, higher-level respondents are more likely to give informed answers. In this particular case, the contrast between low-level and high-level respondents is particularly interesting because it reveals appraisals from different levels of the enterprise hierarchy. [Fig.2 about here]

Figure 2 shows a strong consensus across supervisory levels that incentive problems are the prime cause of "declining productivity." Over 55

percent of the respondents in each of the three supervisory categories blamed incentive problems. Human factors (alcoholism, absenteeism, apathy) are the second-most cited cause, with higher-level supervisors more likely to cite human factors (some 25 percent) as the prime cause of productivity problems than those with limited (or zero) supervisory responsibilities. Poor management comes in a distant third, with slightly less than 10 percent of the respondents citing it as the prime cause of falling productivity. Figure 3 shows a clear monotonic relationship: The higher the level of education, the more likely is the respondent to cite incentive problems as the prime cause of falling productivity.[Fig.3 here]

Figure 4 reveals that the highest proportions of respondents citing incentive problems worked in culture, health, construction, manufacturing, and education (in declining order). Respondents are most critical of bad management in municipal economy and housing, transportation and communications, and construction. Thus respondents appear to single out some branches of the economy that are more poorly managed than others.

The most important conclusion of this section is the overwhelming agreement that incentives are the key to Soviet productivity problems. According to the majority of respondents, poor productivity performance is not caused by the economic system, bad management, or apathetic or drunk workers but by the failure to provide personal incentives that motivate high levels of performance. [Fig.4 here]

It is difficult to assess this result. Western analysts have typically argued that the Soviet wage and bonus system is the most rational

element of Soviet resource allocation.²² The degree of Soviet inequality may not be much different from the industrialized West.²³ Why then should Soviet workers single out the material incentive system as the prime cause of faltering productivity? The responses by branch and personal characteristics provide some clues: The strongest complaints of inadequate incentives appear to be voiced by those who work in poorly-paid branches (culture, health, education), by the highly educated, and by those who work in highly-paid branches that normally require compensating wage differentials (construction). From this, we conclude that the people are who most critical critical of the Soviet incentive system are those who receive low wages relative to the average, who receive low wages for their level of education; or who receive wages that do not compensate them for the negative features of the job.

These factors may explain the variation of responses within the sample; they do not explain the strong consensus that inadequate incentives are the prime cause of Soviet productivity problems. The most compelling explanation is that respondents are reacting to perceived "inadequate" absolute (as opposed to relative) material incentives. If the economy fails to provide what is generally perceived to be a "fair" average return for effort (at least relative to the return anticipated in light of the system's resources), participants may diminish effort and labor productivity suffers. This reaction would occur even if the relative incentive system (what I receive relative to what you receive) is correctly calibrated for economic efficiency.

Respondent reports of personal real wage trends and of perceived poverty incidence support this interpretation. Table 3 shows that over 61 percent of the respondents felt that their real wages had fallen over the previous five years. Workers in the branches of construction, trade, supply, and communal economy, and heavy manufacturing were more likely to report declining living standards, while scientific researchers, low white collar workers, and medical personnel were more likely to report declining living standards among the various occupations. [Table 3 about here]

Modern macro theory teaches that the *perception* of falling real wages (whether true or not) should reduce labor effort, and, hence, could depress productivity. It is clear that respondents judged the material rewards offered by the Soviet economy to the community to be deficient. Respondents thought that about one-third of the residents of their community lived in conditions of poverty (Table 3). Moreover, the feature of Soviet life that evoked the strongest dissatisfaction among respondents was the general unavailability of goods in their community (Table 3).

Statistical series on real wages and on income distribution cannot capture the effect of consumer market disequilibrium on incentives and morale. This is more likely to be captured by subjective responses, which clearly measure the level of dissatisfaction with material rewards. SIP respondents tell an internally consistent story about the causes of faltering productivity in the Soviet economy. They tell us that, although human factor problems such as alcoholism and absenteeism are important, poor productivity performance is due to the failure of the system to

provide real material rewards to elicit the appropriate human effort. There is systematic variation around this central tendency, but the shared perceptions of declining real wages, consumer market disequilibria, and high poverty incidence account for the consensual blame of the material incentive system.

Redundant Labor

The labor redundancy question provides respondents with another opportunity to assess enterprise operations. Rather than asking about output per unit of labor input, respondents are asked to judge the incidence of redundant labor. Redundancy is measured relative to staffing required to meet plan targets. The frequency distribution of responses was given in Table 1.

Figure 5 identifies those occupations in which more redundant labor was reported. Researchers, planners and administrators, culture and arts personnel, and engineers reported more redundant labor. School teachers, skilled white collar, low-skilled white collar, and blue-collar workers reported relatively less slack. Judged in terms of proportions reporting that their "plan could be fulfilled with 50% fewer workers", the occupations with the least slack were medical doctors, skilled white collar workers, teachers, and skilled and semi-skilled blue collar workers. Judged on the same basis, the occupations with the greatest incidence of redundant labor were workers in culture and arts, researchers, engineers,

planners and administrators, and unskilled white collar workers.

The multiple regression of reported labor slack on relevant enterprise and background characteristics is given in Table 4. The economic branches with relatively large amounts of redundant labor (with manufacturing as the reference point) are (in descending order) science, municipal economy and housing, material technical supply, credit, state, and party apparatus, and construction (although the statistical significance of construction is unclear). The higher the level of supervisory responsibility, the more likely is the respondent to report redundant labor. Surprisingly, women report less redundant labor than men. [Figure 5 about here]

What conclusions should be drawn from this exercise? First, the amount of slack reported by respondents does not appear to be staggering. About one half say that there were no redundant workers in their enterprises. Only about one out of five felt that enterprise responsibilities could have been met with 20 percent fewer workers. Workers and employees performing the actual routine tasks of the economy felt that there was less slack than their superiors. [Table 4 about here]

We lack a frame of reference for these questions to judge what is a lot and a little. If the same questions were administered to American workers, we would not be surprised if the results were broadly similar. These results do indeed confirm the existence of redundant workers in the Soviet Union. There are too many scientists, engineers, and cultural workers and too few skilled white collar workers and too few blue collar

workers. In fact, the patterns of redundancy are in accord with the stereotypic picture of the Soviet labor market as oversupplied with engineers and scientific workers and undersupplied with those who perform the routine tasks of the economy. The occupations with the lowest reported redundancy rates appear to be the skilled and semi-skilled white and blue collar occupations.

There are no well-accepted procedures for measuring labor redundancy.²⁴ What we do know is that Soviet authorities are convinced that the Soviet economy suffers from a labor redundancy problem. These findings intimate that official Soviet concerns may be misplaced, although, admittedly, we really do not know how to define the problem. David Granick in his interesting study of Soviet labor markets finds that Soviet officialdom can perceive problems (such as excessive labor turnover) that may not exist in a comparative sense.²⁵ The same could possibly be true of labor redundancy, but we can do no more than speculate at this point.

Supplies, Alcoholism and Absenteeism

Table 1 presented the frequency distributions of reported supply problems and alcoholism/absenteeism problems at the respondent's place of work. The branches and occupations in which these problems are relatively severe are shown in Figures 6 and 7. [Figure 6 about here]

Figure 6 shows that the three branches with the most frequent supply problems were (in descending order) transportation and communication,

municipal economy and housing, and construction. In these branches, 20 to 30 percent complain that they "rarely" or "never" had sufficient supplies and equipment to do their jobs. The occupations that appear to be most plagued by supply and equipment problems are (in descending order) faculty and researchers, doctors and dentists, and semi-skilled white-collar workers.

The principal conclusion is that, with the exception of certain branches (such as transportation, construction, and housing) and occupations (researchers, doctors, and some white-collar workers), typically two-thirds of the branches and occupations were reported as having sufficient equipment and supplies "nearly all the time" or "often." This picture diverges from the stereotype of the Soviet industrial enterprise as suffering from chronic supply and equipment problems. The supply situation of the Soviet industrial enterprise would be best seen in the reports of manufacturing workers, engineers, and blue-collar workers. Relatively small proportions of these workers (11 percent to 18 percent) reported chronic supply problems. [Fig.7 about here]

Figure 7 gives the branch and occupation breakdowns of reported alcoholism/absenteeism problems. Panel A shows a clear branch distribution: Alcoholism and absenteeism were reported with greatest frequency in transportation and communication, construction, and manufacturing and with least frequency in health and education. Panel B gives an even more sharply-defined distribution: Alcoholism/absenteeism is most concentrated in the blue-collar professions and least concentrated among teachers, doctors, researchers, and white-collar workers. Alcoholism/absenteeism is also high among engineers and among workers in culture and arts.

The SIP questionnaire does not allow us to separate alcoholism from absenteeism, but both are indicative of human resource problems at the work place. With certain exceptions (such as culture and arts and engineering), alcoholism and absenteeism appear to be more chronic problems among blue-collar workers. Almost 40 percent of the blue-collar respondents felt that alcoholism/absenteeism was a problem at their place of work "nearly all the time" or "often." The proportions of those reporting chronic alcoholism/absenteeism are much lower among white-collar workers, doctors, and teachers. The pervasiveness of the alcoholism/absenteeism problem is seen by the fact that teachers are the only profession in which less than one in five reported alcoholism/absenteeism to be a chronic workplace problem. Chronic alcoholism/absenteeism appears to be spread fairly evenly among branches with health, education, and science reporting relatively less alcoholism/absenteeism than other branches.

Merit Advancement

Presumably, job performance is affected by the perception that job advancement is due to merit. We have shown above that respondents working in enterprises in which career advancement was based upon merit have a more favorable view of enterprise operations in the Soviet economy. Respondents were asked what factors determined who got ahead in the enterprise where they worked. Figure 8 gives respondent answers broken down into merit advancement (higher education, expertise, talent, good work) and non-merit factors (party membership, connections, good relations with boss, being the right nationality). The pattern by supervisory levels is noteworthy. There is a general upward trend in the proportion of those citing merit reasons for advancement as one moves up the administrative ladder. However, at the highest level (those supervising more than 25 subordinates), a relatively small proportion (29%) cite merit as the most important reason for job advancement. Fifty eight percent cite, instead, party membership and connections as most important. It should be noted that less than half the respondents (39%) believed that merit is the most important factor behind job advancement. The majority (at all levels of supervisory authority) cite non-merit factors as dominating job advancement. [Figure 8 about here]

Given the important role attributed to merit factors in accounting for productivity and respondent complaints about the incentive system, it appears as if the widespread use of non-merit advancement criteria has its economic costs. When enterprises choose to base career advancement on connections, party membership, good relations with the boss, and so on, productivity-enhancing factors like higher education and acquired

knowledge come to be neglected insofar as there are personal costs to acquiring them. As a caveat, it should be mentioned that this is an area where sample bias could distort the results. This sample was particularly exposed to job discrimination and would be more likely than the general Soviet population to emphasize non-merit factors. The key question to interpreting these results is the extent to which respondents do indeed cast themselves in the role of *observers* of enterprise operations. The question on advancement criteria asks them to report on how things were generally done at their enterprise, not how they as individuals were treated.

TIME THEFT AND SECOND JOBS

Finally, we turn to the question of how enterprise working arrangements affect behavior. Specifically, we are interested in how enterprise working arrangements - such as firing patterns, use of merit criteria, etc. - affect actual behavior on the job. The two behavior variables that can be investigated using SIP data are "time theft" from the workplace and the propensity to take on second jobs and engage in second-economy activity.

Time Theft

SIP respondents were asked whether they "sometimes used work time for personal business (like shopping or running errands)?" If they answered affirmatively, they were asked to report how many times per week (on

average) they took unauthorized time off from work and the average duration of the absence from work. [Figure 9 about here]

Fifty nine percent of SIP respondents (with jobs) reported engaging in no time theft. The cross tabulations in Figure 9 suggest that respondents were less likely to engage in time theft if they worked in enterprises where advancement was based upon merit (Panel A). They were less likely to steal time from the workplace if they worked in enterprises where poor workers were fired (Panel B). More highly educated respondents reported more time theft than less highly educated respondents (Panel C).

The logit regression results are recorded in Table 5. The time-theft dependent variable is "1" if respondents stole time from the workplace and "0" if they did not. We hypothesize that time theft depends upon discipline conditions (PINKSLIP) and career advancement criteria within the enterprise (MERIT), upon the respondent's perception of whether he or she is working in a poorly-run enterprise as proxied by whether productivity was falling (PRODOWN), upon the respondent's perception of whether his or her living standard was falling (LIVSTAND), and by background characteristics of the respondent (AGE, FEMALE, SKILLED). We are also interested to determine if time theft varies systematically by economic branch (BRANCH). [Table 5 about here]

The logit regression confirms the cross-tabulations of Figure 7: Time theft was systematically lower in enterprises that rewarded according to merit and in enterprises that fired poor workers. Workers who felt that they were working in poorly-run enterprises were more likely to steal time. In general, branch effects appear to be weak. There is no strong evidence of systematic time theft differences among branches.

More highly educated workers and younger workers were more likely to steal time. The positive relationship between time theft and education could be explained by the greater discretion of educated white-collar workers to come and go. Insofar as more educated workers tend to have higher income, it may also be indicative of a positive income elasticity of demand for leisure. Whether respondents felt that living standards were falling or rising did not systematically affect time theft. Women and men had the same incidence of time theft, other things equal.

An ordinary least squares regression was run on the sample of respondents reporting time theft to determine the factors that systematically affected the *amount* of time theft. These regressions (reported in Table 6) reveal that, of those who steal time from the workplace, women and more highly educated respondents tend to steal more time. Although the perception of a declining standard of living does not affect the probability of time theft, it does increase the amount of time theft among those who engage in time theft. The factors that were shown in Table 5 to significantly reduce the probability of stealing work time -- like working in enterprises that fire poor workers or that use merit criteria for career advancement -- do not significantly affect the amount of time theft. Although there were no clear branch effects on the incidence of time theft, the amount of time theft (by those who steal time) is greater in material technical supply and other productive services and in municipal economy and housing. **[Table 6 about here]**

What conclusions can we draw from these results? The most important is that there are systematic determinants of time theft in Soviet enterprises. Enterprises in which discipline is tighter (in the form of firings of poor workers) are hit less hard by time theft. Enterprises that base career advancement on merit considerations suffer less time theft.

Although the perception of a declining standard of living does not alter the probability of being a time thief, it does affect the amount of time theft. In a sense, workers who steal time retaliate against their enterprises for a perceived drop in real wages by stealing larger amounts of time.

Second Jobs and the Second Economy

Respondents can react to enterprise working conditions by devoting their time and energies to activities outside their primary place of employment. The social consequences of this diversion of effort are not immediately clear because additional output is produced outside the primary enterprise, but perhaps at the cost of output from the primary enterprise.

SIP respondents were not particularly active in second jobs in the state sector or in second economy activities. Only 6 percent held second state jobs at the end of the last normal period. SIP respondents participated more actively in private sector jobs. Some 13 percent reported having "private work or a private job other than a private plot."

We postulate that respondent perceptions of enterprise operating conditions, the enterprise reward system, and personal characteristics systematically affect the probability of having second jobs and private sector employment. A Logit regression is given in Table 7 with the dependent variable a "1" if the respondent had a second job or a private job. The logit results show that women and older respondents were *less* likely to have second jobs or private activities. The two branches whose workers report higher incidences of second jobs and private activity

appear to be health and education. These results (based upon a nonconverging logit regression which is not reported in Table 7) appear reasonable insofar as private tutoring in education and private practice in medicine are well-known sources of private income in the Soviet Union.

The main finding is that enterprise characteristics appear to have little impact on the incidence of private sector activity or second jobs. Economic activity outside of the regular job appears to be more determined by personal characteristics (like being young or being male) than by firm characteristics. **[Table 7 about here]**

CONCLUSIONS

What have we learned from SIP interviews with former Soviet workers and employees that we did not know before? This exercise contributes to our knowledge of Soviet enterprise operations in two ways: First, it provides information on the relative frequencies of phenomena, such as alcoholism problems, supply disruptions, redundant labor, merit criteria, and so on. On a second and more analytical level, this study reveals the traits of enterprises that exhibit specific operating characteristics (such as poor performance), some of the reasons for these characteristics, and the impact of operating characteristics on worker behavior.

The information on relative frequencies supports some a priori expectations and yields surprises. According to respondent accounts, supply disruptions are less frequent in Soviet enterprises than one would expect from the literature. Less than one in five respondents reported regular supply and equipment problems, while two thirds felt that they had

sufficient supplies and equipment for their jobs. This result is puzzling because interviews with former managers stress supply problems as a constant source of irritation.²⁵ Micro participants in the economy do not think that their job performance is particularly hampered by supply disruptions, while enterprise managers tend to feel differently.

SIP respondent felt that they had sufficient information to do their jobs well. The relative lack of complaints about information problems is a surprise. The literature depicts the command economy as plagued both by inadequate information and by confusing information. One would expect information problems to be perceived by micro participants, but such does not appear to be the case.

Respondents confirm the high incidence of alcoholism and absenteeism in Soviet enterprises (one-third report frequent alcoholism/absenteeism problems in their enterprises). While depressing, the portrait of Soviet alcoholism/absenteeism is not drastic. The majority do not believe alcoholism/absenteeism to be a serious problem in their enterprises. It is difficult to say whether the incidence of alcoholism/absenteeism reported by respondents is greater than or less than one would expect from official Soviet complaints, but the notion of an economy paralyzed by alcoholism is not supported by this study.

SIP respondents report what this writer assesses to be relatively little redundant labor. One half said that there was no redundant labor at all in their enterprises, and only a small proportion reported large amounts of redundant labor. The pattern of labor redundancy appears to fit well with a priori expectations. There appear to be too many engineers and scientists and too few skilled white and blue collar workers. The scarce

labor resource appears to be the worker with the industrial skills applied at the shop floor level.

The strongest consensus among SIP respondents concerns poor productivity performance. Three quarters believed that labor productivity was declining. There is a surprising consensus that inadequate material incentives, not bad management or the economic system, are the prime cause of Soviet productivity problems. Analysis indicates that respondents based their assessments on their own enterprise work experiences because of systematic patterns by enterprise characteristics. A profile of poorly-functioning Soviet enterprises emerges from these patterns: In such enterprises, career advancement is not based upon merit, poor workers are fired, and they tend to concentrate in construction, housing, education, and science. Notably, supply problems and alcoholism/absneteeism are not associated systematically with poor enterprise performance.

It is clear why respondents appear so disenchanted with the material incentives offered by the economic system. There is a widespread perception that real wages are falling and that the incidence of poverty is high. The perception of falling real wages appears to be associated with consumer market disequilibria (a point on which there is virtually no disagreement). Moreover, only a minority of respondents felt that career advancement where they work depended on merit factors. The majority felt instead that getting ahead depended on party membership, connections, and the ability to get along with superiors, and the more highly placed the job, the more important are non merit factors. The most disenchanted with the material reward system are those who work in

poorly paid branches, those with higher education, and those who work in branches (such as construction) that typically require compensating wage differentials.

Enterprise working arrangements systematically affect the behavior of Soviet workers. Respondents working in enterprises in which poor workers were fired and advancement was based on merit were least likely to steal time from work. The more highly educated have a higher incidence of time theft, but time theft appears to be spread evenly among branches. Those most disenchanted with material rewards appear to steal more time.

This study confirms that certain Soviet working arrangements have predictable costs. The use of non merit advancement criteria promotes time theft; it also appears to cause disenchantment with the material reward system. Low rates of firing causes discipline to break down, again in the form of time theft. Most generally, workers feel that the low rate of return to effort is the prime cause of Soviet economic performance problems, eclipsing all other possible factors.

NOTES

1. The standard model of the Soviet enterprise is based primarily upon the writings of Joseph Berliner and David Granick. See: Joseph Berliner, *Factory and Manager in the USSR* (Cambridge, Mass.: Harvard University Press, 1957) and David Granick, *Management of the Industrial Firm in the USSR* (New York: Columbia University Press, 1954). The Berliner study is based principally on interviews with a relatively small number of emigres who had worked in Soviet management. Granick's study is based primarily on published Soviet sources.
2. Abram Bergson, *The Economics of Soviet Planning* (New Haven: Yale University Press, 1964).
3. Berliner, *Factory and Manager in the USSR*; Granick, *Management of the Industrial Firm in the USSR*.
4. Judith Thornton, "Differential Capital Charges and Resource Allocation in Soviet Industry," *Journal of Political Economy*, vol.79 (May/June 1971), pp.545-61; Padma Desai and Ricardo Martin, "Efficiency Loss From Resource Misallocation in Soviet Industry," *Quarterly Journal of Economics*, vol.98, no.3 (August 1983), pp.441-56.
5. It is difficult to establish empirically that Soviet productivity is low holding the Soviet level of development constant. For a discussion of this issue, see Frederic Pryor, *A Guidebook to the Comparative Study of Economic Systems* (Englewood Cliffs, N.J.: Prentice-Hall, 1985), chapter 6. Also see Abram Bergson, "Comparative Productivity and Efficiency in the USA and USSR," Alexander Eckstein (ed), *Comparison of Economic Systems* (Berkeley: University of California Press, 1971), pp.161-219.

6. See Susan Linz, "Managerial Autonomy in Soviet Firms," Soviet Interview Project Working Paper, December 1985 for a description of the sample of former managerial personnel among the third Soviet emigration.
7. Interview projects with expert-informants from the third Soviet emigration are being conducted by Linz (see Reference 6), Kenneth Gray ("the Soviet Food Complex"), Paul Gregory ("Planners"), and Helen Otto ("Construction").
8. Post-interview followups with six emigres appear to suggest that most former Soviet citizens can provide an accurate definition of labor productivity.
9. See, for example, Denison's *Why Growth Rates Differ* (Washington, D.C. : Brookings, 1967) and John W. Kendrick, "Survey of the Factors Contributing to the Decline in U.S. Productivity Growth," Federal Reserve Bank of Boston, *The Decline in Productivity Growth*, Conference Series No.22, June 1980.
10. For a discussion of Soviet experiments to reduce redundant labor, see Paul Gregory and Robert Stuart, *Soviet Economic Structure and Performance* 3rd. ed. (New York: Harper and Row, 1986), chap.12.
11. The question reads: "I'm going to read you some things that might have described your job. For each thing that I mention, tell me whether it was true of your job nearly all the time, often, sometimes, rarely, or never." The interviewer then read the following statements concerning the respondent's job: a. You had enough information to do your job well. b. You had to do things against your better judgement. c. You were given an opportunity to make use of your specialty. d. You were able to influence your

supervisor's decisions that affected you. e. You had sufficient equipment and supplies to do your job. f. There was a problem with alcoholism and absenteeism among the workers.

12. The question reads: Many different things can help a person to advance his or her career. In your opinion, which item was the most important for career advancement at your job...? The card which respondents were handed lists eight factors. The eight factors were higher education and a diploma, knowledge and experience, being a man not a woman, being a member of the party, having protektsia and connections, having talent and ability to organize the work of others, having ability and desire to get along with superiors, and being a member of a specific nationality.

13. The party question reads: At that place where you worked, what effect did the party committee have on production problems -- did they make things better, did they make things worse, or did they have no effect? The trade union question reads: At that place where you worked, what effect did the trade union have on wage and premium problems? What effect did it have on working conditions and workers' welfare?

14. The writings of Berliner and Granick on Soviet management during the 1930s through the 1950s suggested that managers were sometimes hampered by the interference of the primary party organization and trade union. On the other hand, it is recognized that the party can assist managers in bargaining for plans and obtaining materials.

15. For a discussion of the logit model, see: Eric Hanushek and John Jackson, *Statistical Methods for Social Scientists* (New York:

Academic Press, 1977), chap.7.

16. Post-interview surveys of six emigres suggested that respondents tend to give the total number of people falling below them in the organization's heirarchy.

17. See the contributions by Donna Bahry, James Millar and Elizabeth Clayton, and Brian Silver in this volume.

18. The most prominent studies of the crisis in Soviet health care have been conducted by Murray Feshbach. See, for example, Murray Feshbach, "Issues in Soviet Health Problems," in Joint Economic Committee, *Soviet Economy in the 1980's: Problems and Prospects*, Part 2 (Washington, D.C.: U.S. Government Printing Office, 1983), pp.203-227.

19. For discussion of human factors and the Soviet productivity slowdown, see Gertrude Schroeder, "The Slowdown in Soviet Industry, 1976-1982," *Soviet Economy*, Vol.1, no.1 (January/March 1985), pp.42-74.

20. A logit regression seeking to explain the factors that systematically explained material-incentive responses (respondents giving an answer citing incentives were assigned a "1", "0" for any other answer) failed to yield any significant enterprise characteristics.

21. The number of supervisory categories has been limited to three because of the relatively small number of respondents to this part of the question.

22. On this, see Gregory and Stuart, *Soviet Economic Structure and Performance*, chap. 10 and Abram Bergson, *The Economics of Soviet Planning*, chapter 6.

23. Abram Bergson, "Income Inequality Under Soviet Socialism," *Journal of Economic Literature* , Vol.22, no.3 (September 1984), pp.1052-1099. Also see the paper by Vinokur in this volume.
24. The economic development literature has long attempted, without success, to develop measures of labor redundancy for LDCs. See: Hla Myint, *The Economics of Developing Countries* (New York: Praeger, 1964), chap.6 and John Fei and Gustav Ranis, *Development of the Labor Surplus Economy* (Homewood, Ill.: Irwin, 1964).
25. David Granick, "Job Rights in the USSR: Their Effect on the Total Organization of the Soviet Economy," Final Report to the National Council for Soviet and East European Research, August 15, 1985.
26. Linz, "Managerial Autonomy."

Table 1: Descriptive Statistics, SIP Sample

A. Was labor productivity declining?	percent
yes	74.5
no	25.5
B. What was the main reason labor productivity was declining?	
1. Material incentives	
lack of incentives	58.1
unavailability of consumer goods	2.4
bad living conditions	1.4
bad working conditions	0.8
2. Poor workers	
alcoholism	10.8
apathy, laziness	10.0
3. Poor management	8.3
4. Insufficient resources, poor technology	2.6
5. The economic system	2.3
6. Other	0.6
C. Plan could have been fulfilled with:	
zero percent fewer workers	47
5 percent fewer workers	49
10 percent fewer workers	35
20 percent fewer workers	22
50 percent fewer workers	11
D. Assessments of job-related problems	
1. How often had sufficient equipment and supplies?	
nearly all the time	55.5
often	11.7
sometimes	14.5
rarely, never	16.2
n.a.	2.1

2. How often were alcoholism/absenteeism a problem?

nearly all the time	9.0
often	23.1
sometimes	26.4
rarely, never	40.4
n.a	1.2

3. How frequently able to use specialty?

nearly all the time	70.5
often	8.8
sometimes	5.7
rarely, never	9.7
n.a.	5.3

4. How frequently had enough information to do job well?

nearly all the time	62.9
often	15.0
sometimes	11.9
rarely, never	4.6
n.a.	5.6

E. Most important factors in career advancement?

higher education	6.3
experience and knowledge	29.4
talent and ability to organize work of others	4.4
party membership	21.6
protection and connections	23.5
getting along with superiors and loyalty	11.3

F. Role of party organization and trade union

Effect of party on production	
made things better	32.9
made things worse	15.2
had no effect	51.9

Effect of trade union on wage matters

made things better	25.4
made things worse	2.7
had no effect	72.0

Effect of trade union on worker welfare

made things better	37.3
made things worse	0.9
had no effect	61.7

Table 2: Logit Regression: "Productivity Declining"

	Regression Coefficient	Standard Error	t-Statistic
<i>ENTERPRISE CHARACTERISTICS</i>			
SUPPLYPROB	.24028	.15485	1.55170
ALCOHOL	-.12914	.11940	-1.08154
MERIT	-.35594	.10852	-3.28000
PINKSLIP	.11384	.04905	2.32065
BRANCH2*	-.75759	.60800	-1.24602
BRANCH3	.04338	.23050	.18820
BRANCH4	.65938	.22557	2.92314
BRANCH5	.21180	.17495	1.21061
BRANCH6	.55425	.39641	1.39817
BRANCH7	.40791	.23759	1.71687
BRANCH8	.13995	.18630	.75119
BRANCH9	.63855	.20798	3.07023
BRANCH10	.40047	.40937	.97824
BRANCH11	.35981	.21165	1.69999
BRANCH12	.96139	.38932	2.46941
<i>RESPONDENT CHARACTERISTICS</i>			
FEMALE	.35726	.11538	3.09646
AGE	.00839	.00413	2.03175
SKILLED	-.02980	.12411	-.24009
SUBORD	.00120	.00136	.88682
CONSTANT	4.77298	.23065	20.69342

Number of observations = 571.

Dependent variable: "It has been said that the productivity of labor in the Soviet Union has been declining over the years. From your own experience during your last normal period, would you have said that was true, or not?" If Yes/true, coded 1. If No/Not true/Don't know, coded 0.

(LOGIT model: $(\text{LOG}(p/(1-p)))/2 + 5$) = Intercept + BX

* See appendix A for branches and other variables

Table 3: Living Standards, Poverty Perceptions, Goods Availability (SIP sample)

A. Proportion of respondents reporting declining living standards

1. All respondents 61.4%

2.By branch

heavy manufacturing	62.3%
light manufacturing	55.0
transportation & communications	57.9
construction	69.3
trade, supply, communal economy	64.1
health, education, culture, science	60.3

3.By occupation

researchers	72.5
engineers	59.8
medical doctors	68.6
school teachers	61.8
workers in culture and arts	56.6
skilled white collar workers	62.1
unskilled white collar workers	71.7
blue collar workers	57.5

B. Percentage of people in community living below the poverty income level 50.0%

C. Perceptions of shortages

Did state stores have enough meat and dairy products?

usually had enough	18.9%
usually were short	81.1

Were other goods in short supply?

yes	94.9
no	5.1

Table 4: Multiple Regression: Amount of Redundant Labor

	Coefficient Estimate	Standard Error	t-Statistic
ENTERPRISE CHARACTERISTICS			
BRANCH2*	2.246920	6.770418	.332
BRANCH3	-1.429125	2.967776	-.482
BRANCH4	2.254802	2.200402	1.025
BRANCH5	1.359631	1.984492	.685
BRANCH6	9.196858	4.195895	2.192
BRANCH7	9.000155	2.569370	3.503
BRANCH8	-.671275	2.666325	-.252
BRANCH9	-2.373014	2.564582	-.925
BRANCH10	-1.664234	4.881379	-.341
BRANCH11	10.110767	2.650443	3.815
BRANCH12	8.913987	3.479004	2.562
RESPONDENT CHARACTERISTICS			
FEMALE	-4.118873	1.315053	-3.132
SUBORD	.012718	.006695	1.900
AGE	-.011890	.049047	-.242
HIGHED	.729914	.354148	2.061
CONSTANT	5.641529	3.488273	1.617
R Square	.10070	589 observations	
Adjusted R Square	.07720		

Dependent variable: "On your (last) job (in/before) (END OF LMP) do you think it would have been possible to fulfill the plan with fewer workers and employees, or would it not have been possible?" Response=FENERWK

If FENERWK=2, Would not have been possible, then SLACK=01
If FENERWK=1, Would have been possible, then

*How many workers and employees do you think were really

needed to fulfill the plan? On your job, could you have met the targets with...2.5%, 5%, 10%, 20%, 50% fewer workers." (Note: the 2.5% implicit in those who thought could fulfill with fewer workers, but not with 5% fewer workers) SLACK-2.5%, 5%, 10%, 20%, 50%.

* See appendix A for branches and descriptions of other variables.

Table 5: Logit Regression: Time Theft

	Regression Coeff.	Standard Error	t-Statistic
<i>ENTERPRISE CHARACTERISTICS</i>			
MERIT	-.23223	.09931	-2.33033
PINKSLIP	-.09112	.04253	-2.14231
PRODOWN	.24269	.11344	2.13929
BRANCH2	.90387	.59415	1.52129
BRANCH3	.19789	.21310	.92860
BRANCH4	.06721	.16936	.39683
BRANCH5	-.02297	.15735	-.14595
BRANCH6	.20836	.28359	.73473
BRANCH7	.07146	.18778	.38056
BRANCH8	-.22784	.17544	-1.29871
BRANCH9	-.42842	.16783	-2.55268
BRANCH10	-.30103	.35353	-.85151
BRANCH11	.26147	.18788	1.39169
BRANCH12	.09312	.24380	.38197
<i>RESPONDENT CHARACTERISTICS</i>			
AGE	-.01383	.00367	-3.76926
SKILLED	.28101	.10914	2.57477
STANDLIV	.07458	.09815	.75987
FEMALE	-.09618	.09598	-1.00209
CONSTANT	5.23676	.21253	24.64006

Dependent variable (Timetheft): "While you were working at that job, did you sometimes use work time for personal business (like shopping or running errands)?" (Yes = 1)

Number of observations = 582

**TABLE 6: MULTIPLE REGRESSION: AMOUNT OF TIME THEFT
(OF RESPONDENTS WHO STOLE TIME)**

	Coefficient Estimate	Standard Error	t-Statistic
<i>ENTERPRISE CHARACTERISTICS</i>			
PINKSLIP	-3.640750	16.160014	-.225
MERIT	-11.511851	40.584287	-.284
BRANCH3	90.840790	74.804740	1.214
BRANCH4	-16.735313	62.871817	-.266
BRANCH5	62.562898	62.246136	1.005
BRANCH6	183.506664	88.523359	2.073
BRANCH7	151.667627	68.202859	2.224
BRANCH8	-52.214673	67.925311	-.769
BRANCH9	59.839575	65.191339	.918
BRANCH10	-125.758908	173.930483	-.723
BRANCH11	-61.388081	65.291285	-.940
BRANCH12	-76.519838	82.328070	-.929
<i>RESPONDENT CHARACTERISTICS</i>			
STANDLIU	65.571989	36.873106	1.778
SUBORD	.054033	.110968	.487
FEMALE	-61.064346	34.927739	-1.748
SKILLED	72.956671	42.932003	1.699
AGE	-1.908919	1.532172	-1.246
PRODDOWN	-33.587117	46.857800	-.717
CONSTANT	183.539697	84.319952	2.177
Multiple R	.36058		
R Square	.13002	Number of observations = 213	

DEPENDENT VARIABLE: "While you were working at that job, did you sometimes use work time for personal business (like shopping or

running errands)?"

If no, then observation dropped.

If yes, "How many times a week did you do that?"

If 0, then coded .333 times per week. Otherwise 1 to 7.

Frequency times "On average, when you used official work time to conduct personal business, how much time per day did you spend doing so?"

TABLE 7: LOGIT REGRESSION: SECOND STATE JOB OR PRIVATE JOB

	Regression Coeff.	Standard Error	t-Statistic
SUBORD	-.00201	.00214	-.93777
MERIT	-.21920	.13597	-1.61216
PINKSLIP	.04992	.05537	.90165
FEMALE	-.36701	.12505	-2.91621
AGE	-.01340	.00560	-2.37292
SKILLED	.06749	.13882	.48616
PRODDOWN	.13693	.14784	.92621
CONSTANT	4.86234	.29261	16.61706

number of observations = 458

Dependent variable: Respondent had either a second job (JOB2) in the state sector or a private job (PJOB).

JOB2: "In (END OF LNP), did you have any other job in a state or cooperative enterprise or organization at the same time as the job we just talked about?)

PJOB: "In (END OF LNP), did you do any kind of private work or have a private job other than a private plot?)

APPENDIX A

INDEPENDENT VARIABLES

BRANCH:

BRANCH1 Manufacturing (Note this has been dropped in regressions. Branch coefficients have the interpretation as the difference from manufacturing branch effect.)

BRANCH2 Agriculture and Forestry

BRANCH3 Transportation and Communications

BRANCH4 Construction

BRANCH5 Trade, soc. catering

BRANCH6 Mat.Tech.Supply, other prod. serv

BRANCH7 Mun. econ. Housing

BRANCH8 Health Phys. culture

BRANCH9 Education

BRANCH10 Culture

BRANCH11 Science

BRANCH12 Credit, State, Party

ENTERPRISE:

SUPPLYPROB

Rarely or never had sufficient equipment/supplies for job

ALCOHOL Rarely or never had problem with alcoholism/absenteeism

MERIT Most important for job advancement (high.ed., diploma knowledge, experience, talent, ability)

PINKSLIP Frequency of observed firings for poor performance (0=never, ..., 3=usually)

RESPONDENT:

FEMALE Female

AGE Respondent's Age

SKILLED Completed secondary specialized school and higher

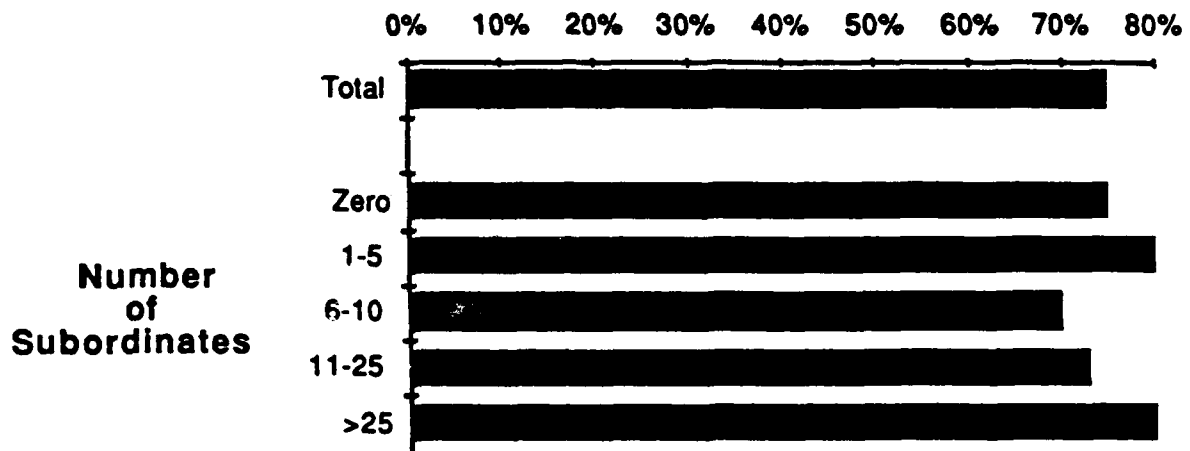
SUBORD Number of subordinates in R's LNP job.

STANDLIU perceived decrease in living standard--Those R's reporting that prices had increased faster than own wage

PRODDOWN Reported a decline in productivity during LNP

HIGHED Highest educational attainment (0= <4 years of general education, ..., 8 = completed a program of higher education)

FIGURE 1
PRODUCTIVITY DECLINING?



"It has been said that productivity of labor in the Soviet Union has been declining over the years. From your own experience during your LNP, would you have said that was true, or not?"

FIGURE 2

**MAIN REASON FOR PRODUCTIVITY DECLINE
(N=282)**

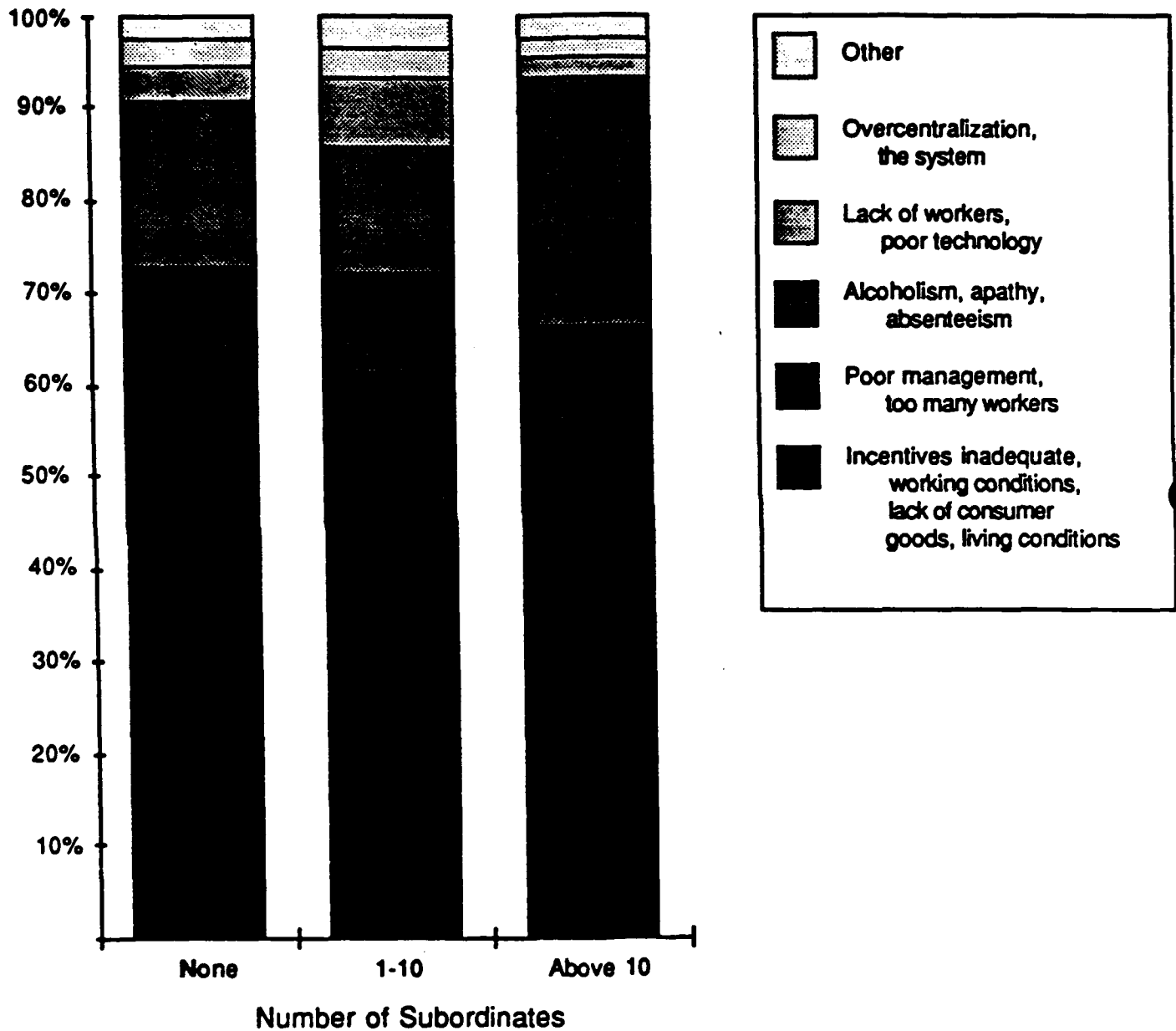


FIGURE 3

**REPORTED INCENTIVE PROBLEMS
BY RESPONDENT'S EDUCATIONAL LEVEL**

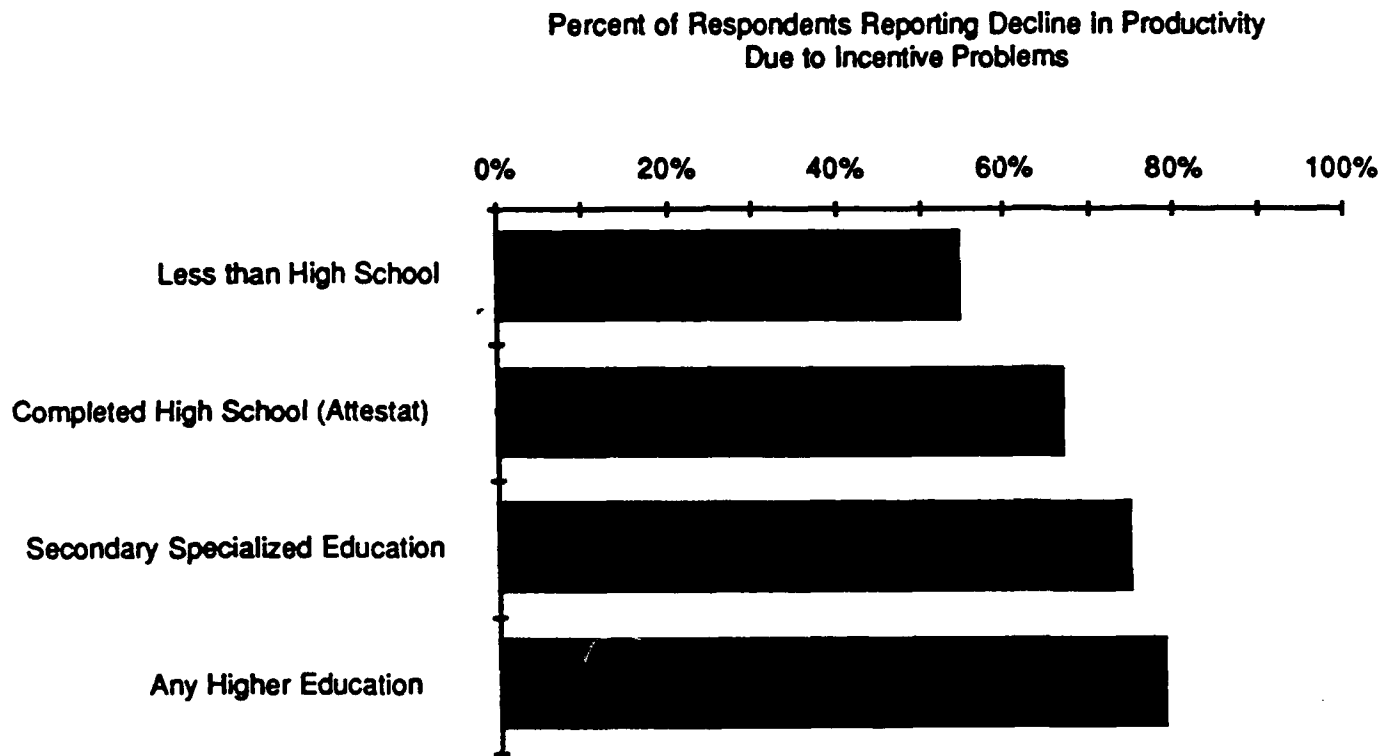
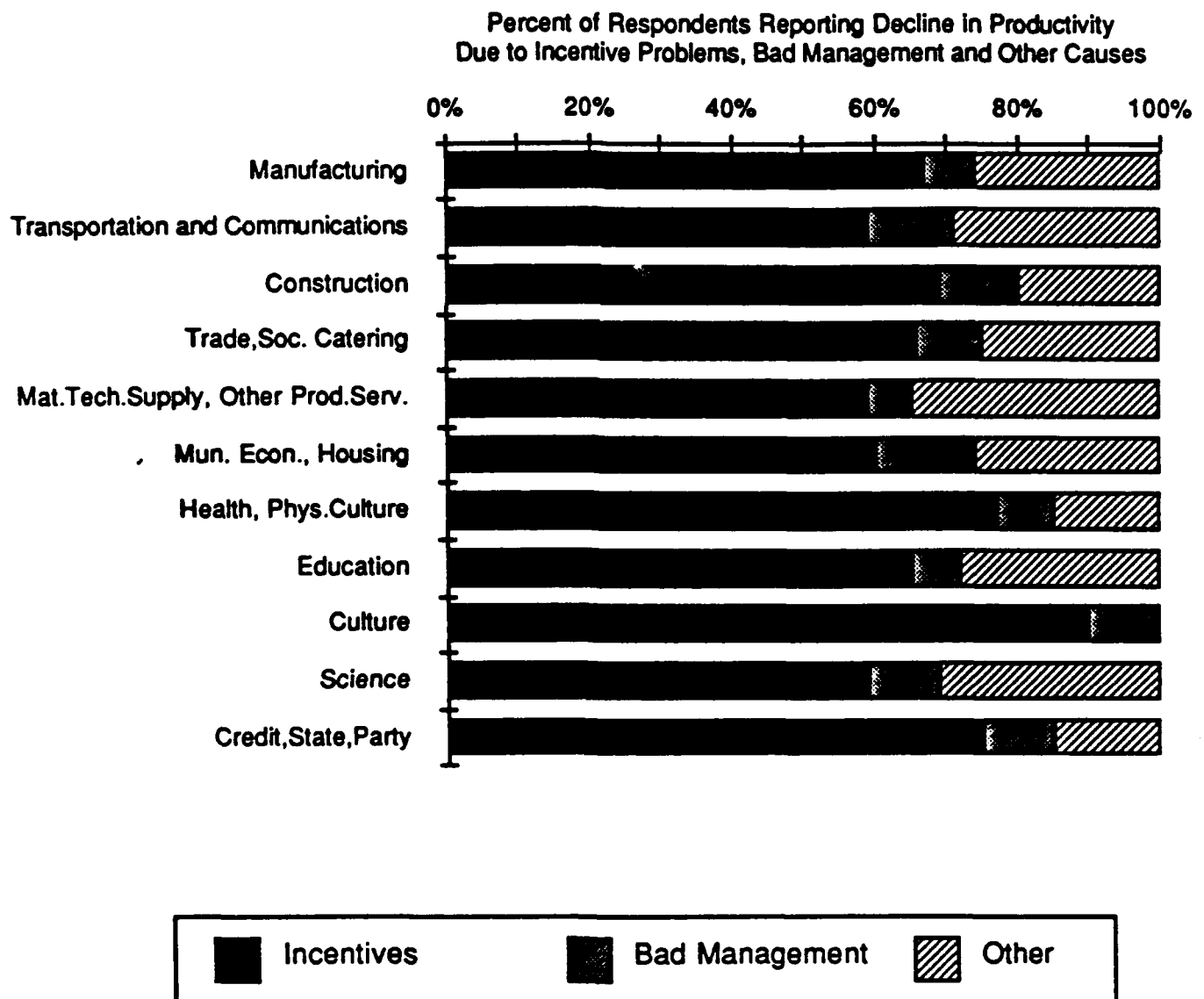


FIGURE 4

**MAIN CAUSES OF PRODUCTIVITY DECLINE
BY RESPONDENT'S BRANCH**



PERCENT OF RESPONDENTS WHO REPORTED HAVING PLANS

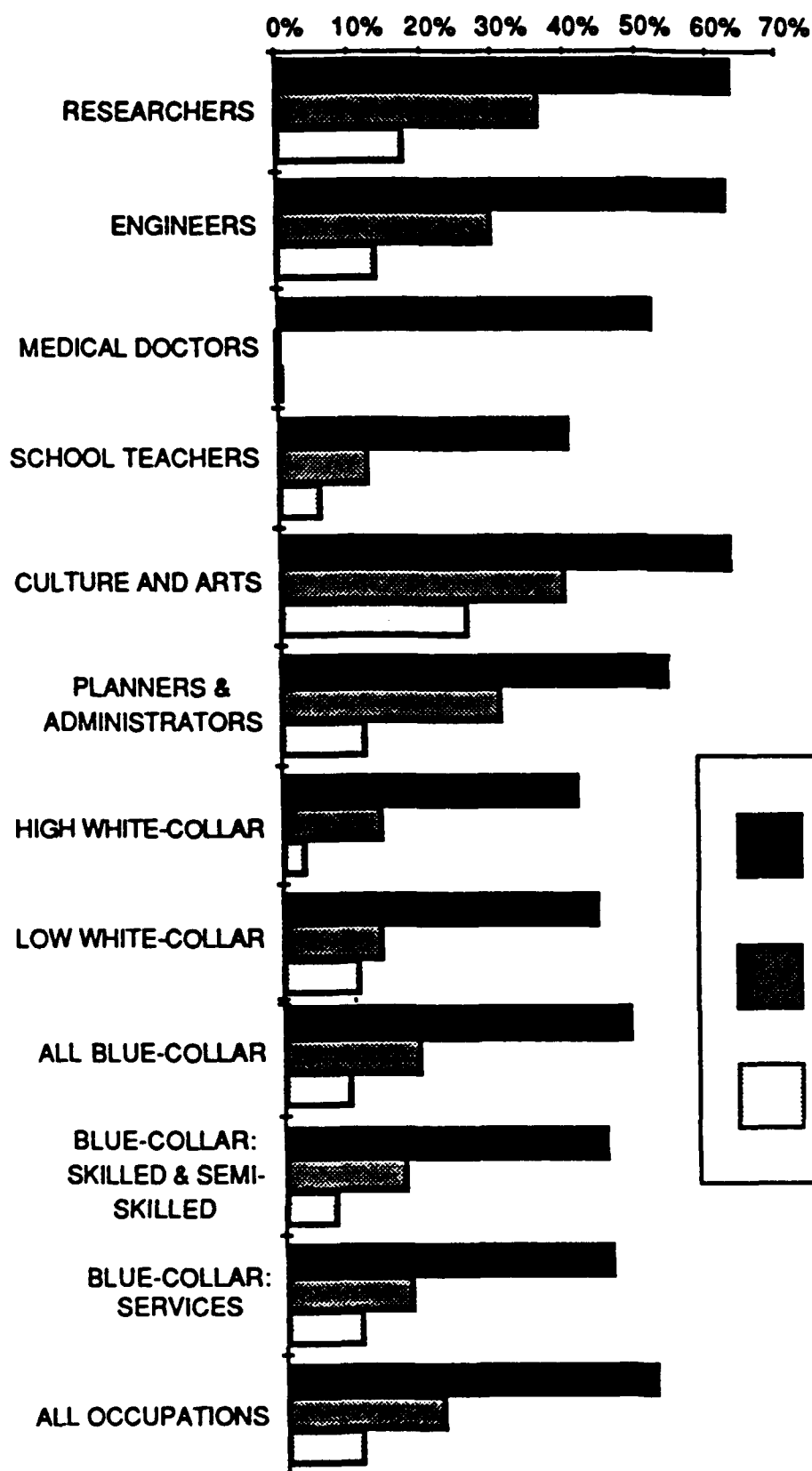


FIGURE 5
PERCEIVED
PLAN SLACK
BY
OCCUPATION

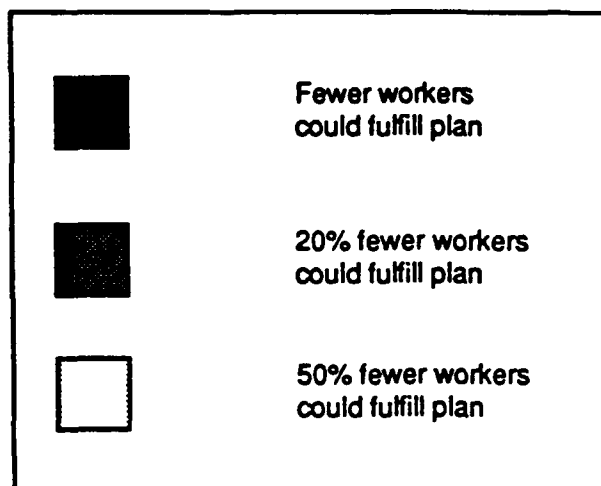


FIGURE 6

**PROPORTION OF RESPONDENTS REPORTING
RARELY OR NEVER HAVING SUFFICIENT
SUPPLIES/EQUIPMENT
BY BRANCH AND OCCUPATION**

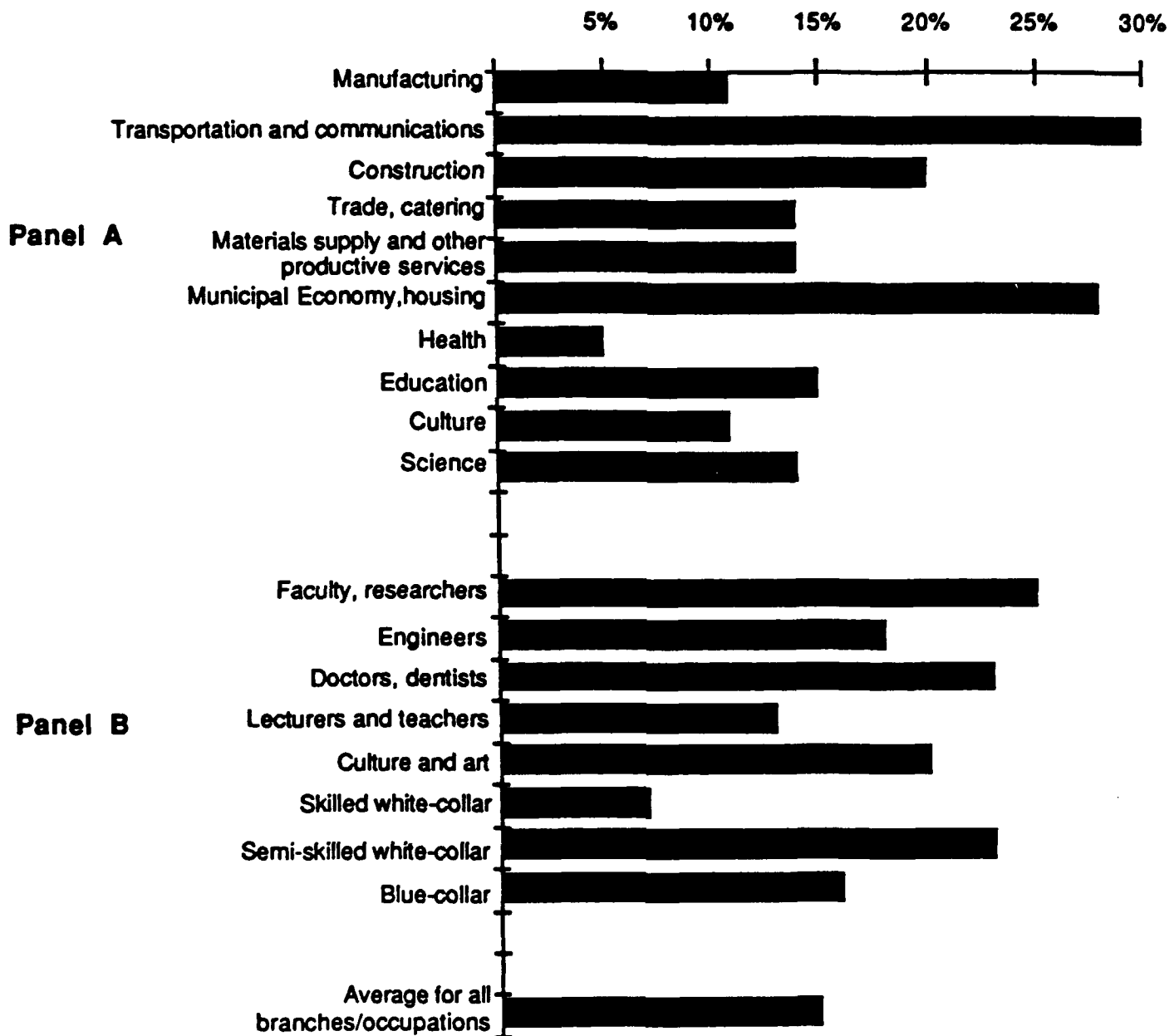


FIGURE 7

**PROPORTION OF RESPONDENTS REPORTING
ALCOHOLISM/ABSENTEEISM A PROBLEM
OFTEN OR NEARLY ALL THE TIME
BY BRANCH AND OCCUPATION**

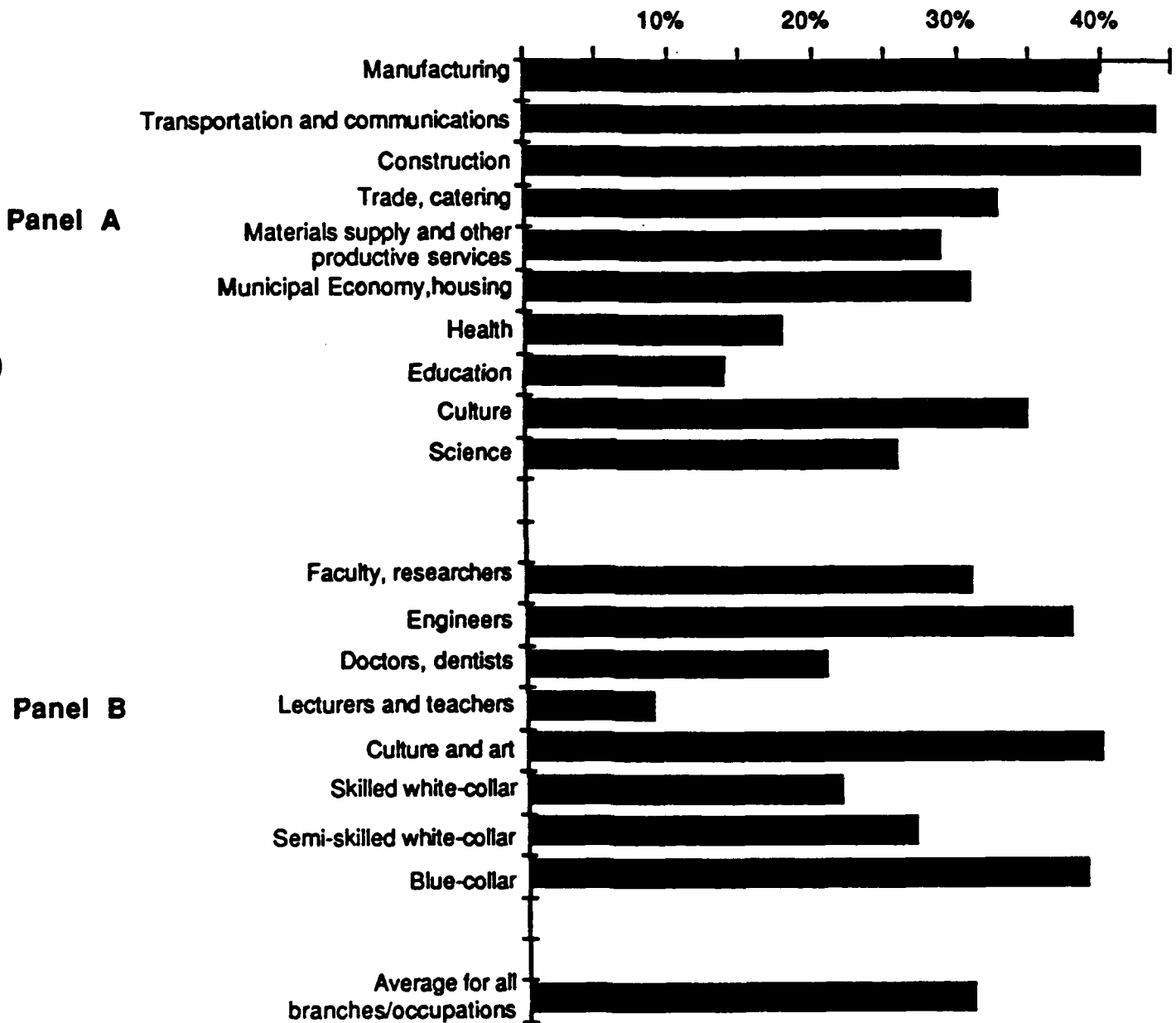


FIGURE 8

**TIME THEFT
BY IMPORTANCE OF MERIT, FREQUENCY OF FIRINGS
AND RESPONDENT'S EDUCATION**

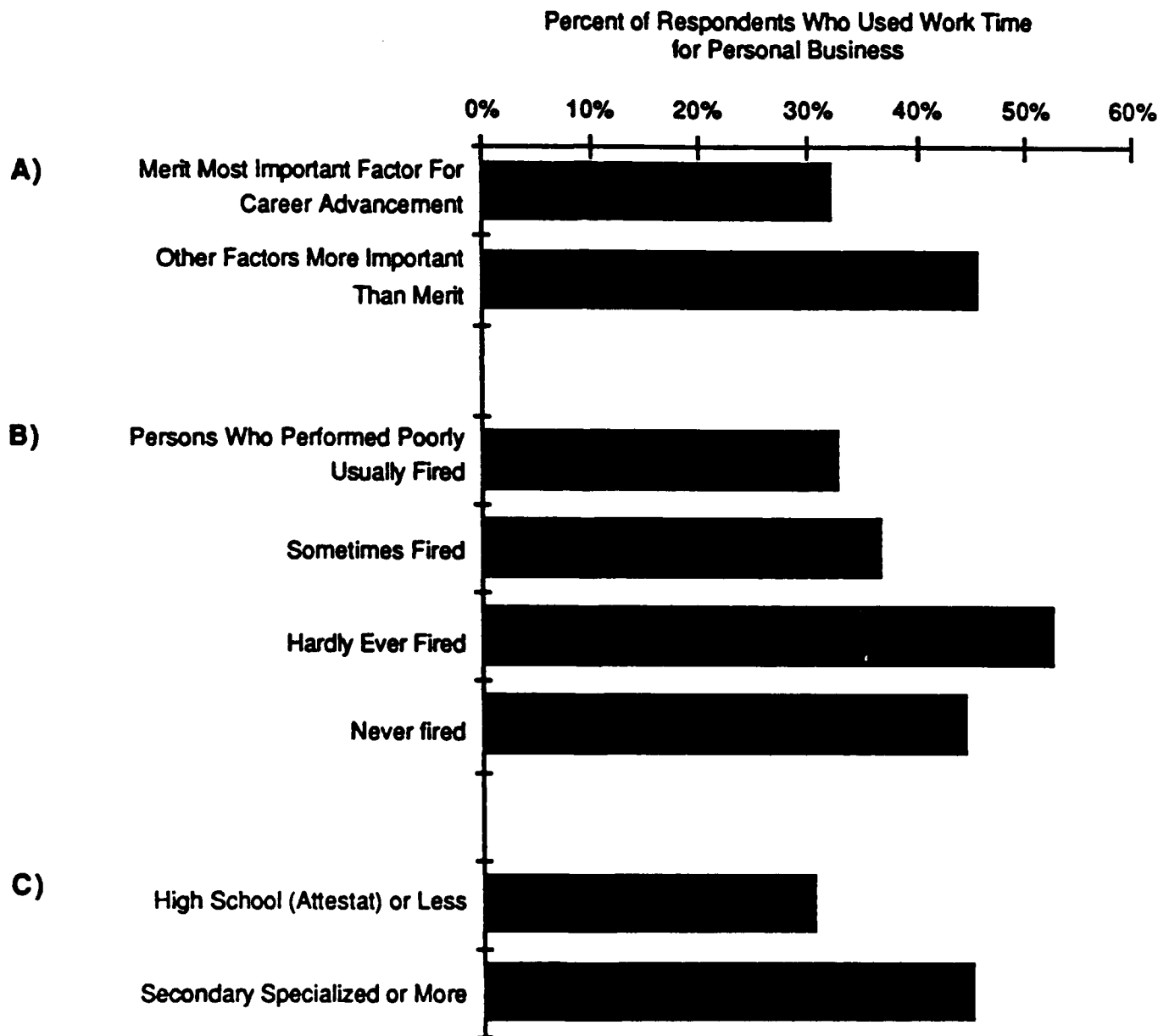
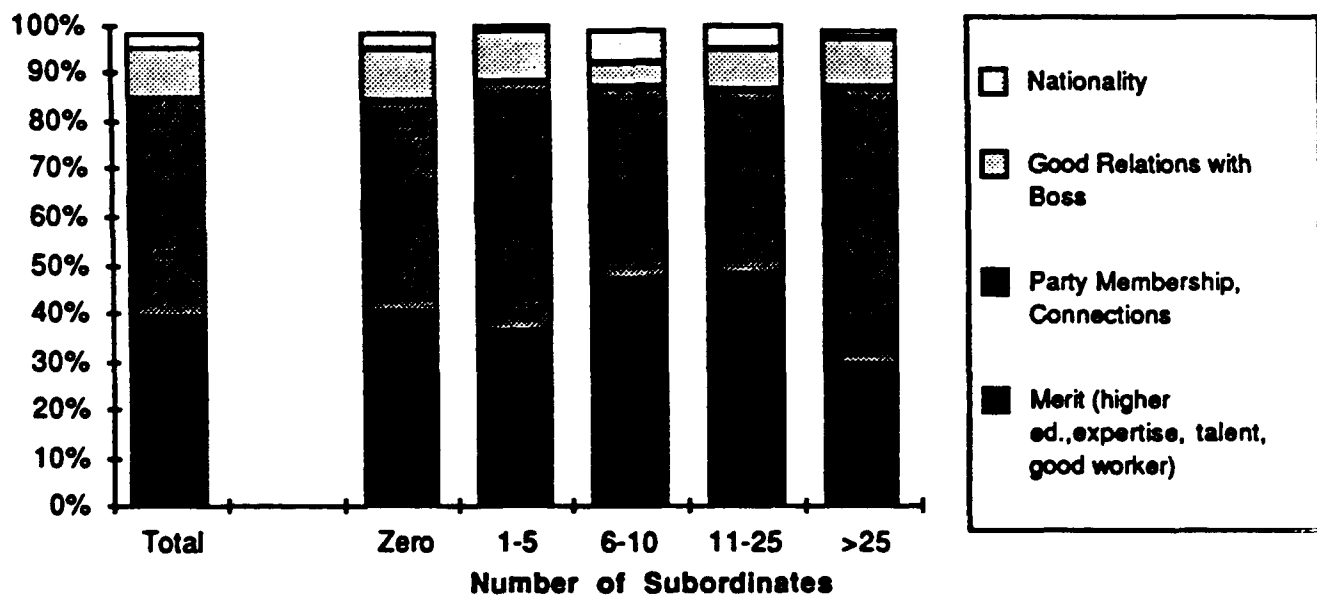


FIGURE 9

MOST IMPORTANT REASONS FOR JOB ADVANCEMENT



**LIFE: SOCIAL STATUS, ETHNIC RELATIONS
AND MOBILIZED PARTICIPATION**

Chapter Nine

Perceptions of Social Status in the USSR

Michael Swafford

PERCEPTIONS OF SOCIAL STATUS IN THE USSR¹

The October Revolution produced a memorable spectacle. As one commentator later described it: "All classes were thrown like so much scrap into a melting pot beneath which burned the fires of the revolution dissolving all the old identities. . . . Court ladies cleaned the streets of snow, steel barons functioned as members of house committees and together with porters and shoemakers solved questions of keeping toilets clean and obtaining firewood.² Of course, as Sovietologists well know, this venture into extreme egalitarianism was abandoned more than five decades ago, when Stalin himself denounced "the 'Leftist' practice of wage equalisation."³ Yet, to this day, many Westerners remain curious about social stratification in the Soviet Union--the first country born of a Marxist revolution to overcome the injustices of capitalist class systems.

The question of Soviet stratification has much to recommend it, not just to Sovietologists, but to social scientists in general. New findings on stratification could facilitate efforts to test or generalize Western findings. Consider, for example, the proposition that social perceptions help transmit social status⁴ from parent to child. As Bowles and Gintis state, in a much-acclaimed analysis of schools in capitalist American society: "Youth of different racial, sexual, ethnic, or economic characteristics directly perceive the economic positions and prerogatives of 'their kind of people.' By adjusting their aspiration accordingly, they . . . reproduce stratification on the level of personal consciousness. . . ."⁵ Cannot the same claim be justifiably made about the perceptions of people

within a Soviet-style society--that they perceive a social hierarchy, peg themselves in that hierarchy, and adjust their aspirations accordingly, thereby maintaining the social order? Evidence from the USSR could help determine whether this process is generated by capitalism per se, as Bowles and Gintis suggest, or whether it is universal in industrial societies. More generally, such evidence could help social scientists determine the nature and extent of variation across human societies.

For Sovietologists, the question of social stratification takes on further significance. Given the importance of social status in explaining an enormous range of Western behavior--from child-rearing to political participation, from language usage to artistic tastes--its parallel importance in explaining Soviet behavior is obviously worth exploring. But stratification offers more than a mere explanatory variable. The stuff of which any social system is made--values, norms, power, the distribution of goods, recruitment into adult roles, social solidarity, conflict, et cetera--inevitably manifests itself in the stratification system. Hence, any study of Soviet society in its totality should address the question of stratification.

Capitalizing on the exodus of Soviet citizens in recent years, the Soviet Interview Project (SIP) has provided an opportunity to examine an aspect of Soviet stratification rarely studied: ordinary citizens' perceptions of social status. This chapter presents the preliminary findings on the salience of four attributes which Soviets might take into account when judging others' social status: occupation, Communist party (CPSU) membership, education level, and ethnicity.

The chapter also argues that the results accurately represent the perceptions of Soviet citizens, despite the fact that the study relies on interviews of emigrants.

Previous Research on Soviet Social Stratification

It would be misleading to suggest that stratification in the USSR remains a great mystery. Even during the first three decades of Soviet rule, firsthand accounts provided a glimpse of the emerging social structure. Although many early journalistic reports saw promise in the "great experiment,"⁶ by the late 1930s trenchant criticism of Soviet inequality was emanating from the ranks of Marxists⁷ and sympathetic Western socialists were becoming disillusioned.⁸ And by 1944 the West had an informed introduction to Soviet stratification in the work of David Dallin, a former member of the Moscow soviet, or city council.⁹

Only after World War II, however, did the first survey data on the subject materialize. The Harvard Project on the Soviet Social System, surveying some 2,700 Soviet citizens displaced by the war, established the utility of employing six categories in describing Soviet class structure: party and government elite, intelligentsia, low-level non-manual employees, skilled manual workers, ordinary manual workers, and collective-farm peasants. In presenting these findings, Inkeles and Bauer concluded:

In a modern industrial society which lacks formal legal class divisions, any formula for dividing the population into classes will be somewhat arbitrary as to the number of classes

it designates. . . . the crucial point is that by the late thirties the Soviet Union had a social class structure which, in its broad outlines, was very much like that in the other major industrial countries of Europe and America. True, there were no landowning or industrialist upper classes and no nobility, but there was an analogous class in the distinctive political elite which lived on a relatively lavish scale, and shared its material abundance with a managerial, scientific, artistic and literary elite.¹⁰

It is instructive to consider how Soviet authorities respond to conclusions such as these, and how they characterize social differentiation in their own country. Fortunately, since Soviet sociology was resuscitated in the early 1960s, we are no longer obliged to rely solely on official pronouncements of leaders and ideologists; we can also take advantage of some commendable analyses by Soviet scholars who have conducted relevant empirical research in the USSR.¹¹

Clearly, Soviet ideologists and sociologists alike reject any analysis like that set forth by Inkeles and Bauer.¹² Their objections grow not out of Western claims that Soviet society has classes, but rather in how those classes are defined. Not surprisingly, Soviet writers hew rigidly to the Marxist-Leninist sense of klass, in which the criterion of class membership is people's relationship to the means of production. Under Soviet law, the State owns the

tools and factories used in production by manual workers (rabochie), while collective farms technically own the means of production used by collective farmers (kolkhozniki). Hence, these two groups are considered separate classes in Soviet society.

The 1977 Constitution of the USSR identifies yet a third social category, the "people's intelligentsia," which in its broadest sense comprises so-called "mental workers."¹³ Statistical handbooks, as well as many Soviet sociologists, often instead refer to this third category as the sluzhashchie ("employees"), which again refers to all employed people who do not qualify for membership in the two official classes.¹⁴ Whether labeled "intelligentsia" or "employees," this third category is never described as a class because its relationship to the means of material production is undefined in Soviet ideology. Instead, it is described as a stratum (sloi) in the service of the working class.

Soviet ideologists and sociologists, then, reject analyses such as those set forth by Inkeles and Bauer because such analyses employ a non-Marxist concept of class. For this reason, they also inveigh against common Western terms like "middle class," in which "class" denotes an arbitrary segment of a continuum based on, say, occupational prestige, education, and earnings.¹⁵ In keeping with Marxist philosophy, they instead identify two basic classes in capitalist societies: the bourgeoisie, who own the means of production; and the proletariat, who must sell their labor to the bourgeoisie. These two classes are said to be antagonistic towards one another, in sharp contrast to the two "friendly" (druzheskii) Soviet classes.

It follows that Soviet ideology strenuously rejects claims that Soviet class structure is "much like that in the other major industrial countries of Europe and America."

Although the Marxist concept of class is central to virtually every Soviet publication on social structure in the USSR, it is by no means the only recognized basis of social differentiation. The constitution--which embodies the core of Soviet ideology--also discusses differences in earnings, justifying them in terms of the "quantity and quality of work" (Articles 14 and 40). Several other social attributes are mentioned in Article 34, which ostensibly guarantees equality before the law regardless of "social origin (proiskhozhdeniia), social or property status (polozhenie), race or nationality, sex, education, language, attitude towards religion, type or character of employment, place of residence, and other circumstances."¹⁶ Admittedly, Article 34 speaks of equality, not of differentiation; however, the very fact that the authors of the constitution found it necessary to guarantee equality irrespective of these attributes reveals their salience as potential bases of differentiation.

Acknowledging social differentiation is not, however, the same as acknowledging the existence of social stratification. Though hundreds of Soviet authors have published on the relatively safe topic of social differentiation, few have ventured into an empirical treatment of the USSR's social hierarchy--an undertaking that might emphasize shortcomings in efforts to build a classless society.¹⁷ Soviet sociologists' research on this subject requires further

consideration here, since it provides a natural backdrop against which to view the Soviet public's perceptions of social status.

The acknowledged bases of social differentiation can be separated into two categories. First, there are attributes such as nationality and sex for which Soviet ideology offers no official rankings. Moldavians and Belorussians, for example, belong to different nationalities, but Soviet ideology does not officially confer higher rank to members of either ethnic group on the basis of nationality per se. Likewise, neither sex is explicitly valued more than the other. It would be naive to suggest that authorities do in fact maintain entirely evenhanded policies towards these social groups; any favoritism, however, does not derive from ideological principles.

Much the same can also be said for class or stratum membership. Nowhere do authorities rank members of the intelligentsia higher than the collective-farm peasantry on the basis of class membership. Soviet ideology does admittedly bill the working class as the "leading revolutionary class," and this might be taken to bespeak a superior rank; but it would perhaps be more accurate to describe workers as "first among equals."

There are, however, several bases of differentiation about which Soviet ideology clearly expresses values. More education is considered better than less, and atheism is considered better than religious faith. Furthermore, recall that some work is considered to have more "quantity and quality" than other work; thus, some people are paid more than others. Ranking people on the basis of certain achieved characteristics, then, is sanctioned.

In describing the USSR's social hierarchy, most Soviet sociologists focus on these achieved characteristics. They are careful, however, to emphasize that their attention to these characteristics serves merely as an elaboration of, not an alternative to, a "proper" class analysis based on people's relationship to the means of production. This point is well-illustrated in the work of M. N. Rutkevich, a prominent Soviet sociologist who has characterized Soviet social structure as "hierarchical" and "multilevel." Rutkevich writes of the "skilled" versus the "unskilled" strata (sloi) within the working class, collective-farm peasantry, and intelligentsia. He explains further that such skill differences translate into social differences, which in turn "entail without fail differences in the sphere of distribution" [earnings and access to goods].¹⁸ Notice particularly that he does not posit a single hierarchy of skill in which, say, unskilled laborers in the working class and collective-farm peasantry are assigned to the same low stratum. Such a hierarchy might well serve as an (objectionable) alternative way of looking at Soviet social structure. Rather, he maintains that a hierarchy exists within each class, attempting thereby to reaffirm the primacy of class as an analytical category.

Much the same strategy can be seen in the work of O. I. Shkaratan and associates, who have carried out some of the most outstanding sustained Soviet empirical research on social structure. Shkaratan and Rukavishnikov begin by acknowledging that social differences "are connected not only with the existing two forms of socialist property, but also with a certain socioeconomic heterogeneity of

work. . ."19 They attempt to capture this heterogeneity in the concept "character of work," which embodies two components: "the content of work" and "the socioeconomic conditions of work."20

What distinguishes the work of Shkaratan and associates is that they have actually applied their concepts in a large survey of adults in a major Soviet city (Kazan) in order to delineate the strata of an urban population. Following is the "typology of strata" they developed on the basis of their empirical work:

Manual Workers (i.e. working class)

1. manual workers with little or no skill;
2. skilled manual workers;
3. highly-skilled manual workers, combining mental and physical functions;

"Employees" and specialists

4. working people performing low-level mental labor not requiring higher or secondary specialized education;
5. working people performing skilled mental labor requiring a secondary specialized education;
6. working people performing skilled mental labor requiring a higher education;
7. working people performing skilled mental labor requiring a higher education and additional training (e.g. scientists and "the artistic intelligentsia");
8. working people performing highly-skilled managerial work.21

Shkaratan's description of urban social structure aptly represents

Soviet research on this topic: class membership remains the central category, and strata within each class or social group are defined on the basis of criteria considered legitimate for ranking--work, and indirectly, education and earnings. However, Shkaratan and his associates do wax bolder than most in positing a single hierarchy in which even the most skilled members of the working class fall below the lowest stratum of the intelligentsia, or "employees." Their work, then, brings us full circle to Inkeles and Bauer. Except for the omission of the collective-farm peasantry (due to their focus on urban populations), their hierarchy bears a striking resemblance to the six levels proposed by Inkeles and Bauer: at the bottom fall the unskilled manual workers; at the top, high-level managers.

Perceptions of Social Status

Despite the substantial literature on Soviet social structure produced since World War II, a notable gap remains in it. Although we know what authorities say on the subject, we still know very little about ordinary citizens' perceptions of the social structure, because the subjective aspects of stratification have seldom been studied by Soviets.²² Marxist ideology downplays subjective factors, which might merely manifest the "false consciousness" of the populace; and the Soviet regime, perhaps fearful of embarrassing results, restricts the requisite survey research.

Readers familiar with Soviet sociology may question the assertion that the subjective aspects of stratification are given short shrift. After all, Soviet studies of occupational prestige exist, and these would seem to bear directly on citizens' perceptions of social

status. These studies, however, fail to do justice to the question at hand. Consider, for example, the work of V. N. Shubkin and his students. Although the term "prestige" (prestizh) is used repeatedly in publications spanning two decades, their studies actually measure the "attractiveness" (privlekatel'nost') of occupations--that is, occupational preferences. Shubkin's work is interesting and important, but it does not attempt to address the question of prestige directly.²³

At least three other Soviet sociologists have made a clear distinction between the prestige and attractiveness of occupations, and their studies constitute some of the most outstanding quantitative sociological research on any subject in the USSR.²⁴ However, by virtue of their focus on young people's vocational choices, they do not directly address the larger question of social stratification, including factors other than occupation that may contribute to social status. But other factors do contribute. Surprisingly, support for this claim can even be found in the Great Soviet Encyclopedia, in an article entitled "social status" (sotsial'nyi status):

Marxist-Leninist class theory makes it possible to analyze the division of society into various classes, social groups, and strata, and to define the principles underlying people's status. In a socialist society, with its absence of class antagonism, the most important variables that determine the status of a group are occupation and educational qualifications (and

consequently wages), as well as age, marital or family characteristics, and regional or local categories.²⁵

This statement reads like a research-based conclusion, validated to such an extent that it has earned a place in one of the Soviet Union's most authoritative compendiums of knowledge. However, since the relative contribution of such factors as occupation and education to social status has apparently never been examined empirically in the USSR, this study treats it as a point of departure rather than a conclusion. In short, then, this study measures what Stanislaw Ossowski, in his seminal Class in the Social Consciousness, termed a "synthetic gradation": a social hierarchy based not on one attribute (say, occupation), but on information about several attributes given weight and combined in a manner characteristic of members of a particular society.²⁶

Measuring Perceptions of Social Status

The best approach to measuring perceptions of social status derives from a method for studying occupational prestige developed over the past sixty years. In Western studies of occupational prestige, respondents are typically given tasks of the following sort: "For each job mentioned, please pick out the statement that best gives your own personal opinion of the general standing that such a job has."²⁷ Notice that respondents are not asked to reveal their own occupational preferences, but rather to give their own impressions of how the general public views the social standing of each occupation. The mean rating given to each occupation, often transformed

to a 100-point scale, constitutes the prestige score of that occupation.

Two findings of previous studies have added impetus to the research described below. First, the occupational prestige scores yielded by such studies are remarkably consistent with one another, despite methodological variations, time lapses, and cultural differences. The scores from the large-scale 1947 and 1963 NORC studies, for example, correlate .99 (r) with one another.²⁸ More importantly, the prestige scores yielded by such procedures have proven quite useful in sociological inquiry during the past three decades.²⁹

Second, people with disparate social attributes tend to agree with one another in rating occupations. For example, although men and women often experience different realms of the job market, they agree on average about the standing of occupations. Likewise, people with blue-collar jobs agree on average with managers and professionals, despite the fact that this requires them to acknowledge their own lesser status.³⁰ Since people with disparate social attributes render very similar ratings of occupations, we can assume that Soviet emigrants' perceptions of social status agree with those of the Soviet citizens, even though they differ from those citizens in ways that led them to emigrate. Evidence supporting this assumption is presented below.

In recent years, the techniques used to measure occupational prestige have been modified to show how factors other than occupation contribute to social status.³¹ Consider the procedure employed in this study to examine the salience of education, ethnicity

(natsional'nost'), CPSU membership, as well as occupation in emigrants' perceptions of social status. A randomly-chosen subset consisting of 320 Soviet emigrants was handed a 9-page booklet in which the following two hypothetical Soviets were described (in Russian) on pages 1 and 2:

Page 1	Tatar
	with incomplete secondary education
	not a party [CPSU] member
	works as a janitor.

Page 2	Russian
	with a higher education
	member of the party [CPSU]
	works as a professor.

They then heard the following instructions in Russian:

"Look at the description of the person on the first page and rate his social status (prestige) [sotsial'nyi status (prestizh)] in comparison to other Soviet people. On this scale, "1" means the person has the lowest social status (prestige), "9" means the person has the highest social status (prestige). Circle the number that represents this person's social status."

"Now turn the page. What is the social status of this person? Remember, 1 is the lowest, 9 is the highest."³²

The ratings of these first two vignettes are presented in Table 1. Almost half the respondents agreed that the Tatar had the lowest possible social status (mean rating=1.94), while more than half the respondents gave the Russian professor on page 2 a rating of 8 or 9 (mean rating=7.91). As in all studies of this sort, there were a few anomalous answers, and approximately 10 percent of the respondents did not complete the task. On the whole, however, there was a substantial level of consensus.

TABLE 1 ABOUT HERE

The main purpose of the statistical analysis was to determine how much respondents weighed each piece of information when evaluating the statuses of each of the two hypothetical people. Since such an analysis would be mathematically impossible with only two vignettes, respondents were asked to complete seven more pages containing a total of 28 vignettes, each of which described a hypothetical Soviet person. The descriptions were based on a list of eight occupations, two states of CPSU membership (member and non-member), six education levels, and five ethnic groups (all listed below). Thus, 480 (or $8 \times 2 \times 6 \times 5$) distinct vignettes were possible. However, only a subset was actually presented to respondents because (1) the statistical analysis (linear regression) did not require that all combinations

be used and (2) respondents could not be expected to rate a large number of vignettes carefully. The subset presented to respondents was as balanced as possible; however, as is customary in studies of this sort, combinations which seemed highly unlikely (e.g., a scientist with an elementary education) were not presented.

While the first two pages of the instrument were identical for all 320 respondents, the last seven pages differed considerably across respondents. First, the order of vignettes was varied to insure that ratings would not merely reflect positional differences. Second, to preclude uninteresting order effects, the order of attributes within vignettes varied (e.g. some respondents received vignettes in which occupational information appeared first; others rated vignettes in which CPSU membership appeared first; and so on). Finally, five independent designs, with different sets of occupations, were employed to test the replicability of the findings.

Before proceeding to the results, let us consider some possible outcomes. As regards the salience of occupational information, Soviet literature clearly identifies occupation as the most important objective determinant of the hierarchy within classes. Of course, this fact might merely reflect the ideological constraints under which Soviet sociologists work, not the perceptions of citizens; but if the experience of other industrialized countries is indicative, we would in fact expect occupational information to be quite salient to Soviet citizens.³³ Likewise, given the Soviet emphasis on education and the intense competition for admission to institutions of higher education, educational achievement surely confers status.

The function of party membership in perceptions of status is more debatable. In Western countries, the salience of political affiliation in perceptions of status has rarely been studied, most likely because its contribution is captured by more fundamental correlates, such as education and earnings. In the Soviet Union, however, party membership directly affects people's daily lives and life chances far more than political affiliation does in the West. Its effect on perceived social status therefore seems well worth exploring.

Finally, consider the importance of ethnicity. Again, ethnic groups are not ranked officially, but this does not prove that the Soviet public refrains from ranking people according to ethnicity. Admittedly, indoctrination on the "friendship of nations" may have succeeded in training people to ignore ethnicity, and Soviet citizens' exposure to an uncommonly diverse range of ethnic groups may have reduced the salience of ethnicity. On the other hand, a disposition to maintain ethnic identity despite the daily onslaught of diverse ethnic stimuli might have instead heightened people's awareness of ethnicity.

Table 2 presents the results in the form of five regression equations, one for each of the separate designs. Respondents' 7,600 ratings of hypothetical Soviet citizens' status constitute the dependent variable. For each respondent, judgments were standardized to have a mean of 50 and a standard deviation of 15; they varied between approximately 10 and 90. Roughly speaking, then, the results are

presented as though respondents gave ratings between 10 and 90 rather than between 1 and 9, as in the above example.³⁴

TABLE 2 ABOUT HERE

Consider the regression equation for the first design, in column 1. One use of this equation is to predict the ratings earned by the vignettes in the study. For example, a vignette describing a salesclerk who served as a member of the CPSU, completed secondary education, and belonged to the Uzbek ethnic group would be predicted to receive rating of 44.7 ($27.4 + 10.1 + 9.6 + 4.4 - 6.8 = 44.7$) on a scale of approximately 100. Likewise, a vignette describing a state farmer who did not belong to the CPSU, who had a low education, and who was an ethnic Russian would be predicted to rate 27.4 ($27.4 + 0.0 + 0.0 + 0.0 + 0.0$). The equation predicts unusually well: the predictions correlate .78 with the standardized answers given by respondents.³⁵ If respondents had assigned ratings randomly (in response to a meaningless task, for example), or if they had disagreed substantially with one another, the correlation would have approached zero.

For our purposes, however, the most important use of the equations lies not in their predictions, but in the partial regression coefficients. Consider, for example, the "32.5" for journalist. This coefficient should be interpreted as follows: for vignettes that were matched with respect to party membership, education, and ethnicity, those with "journalist" on them were rated, on the average, 32.5 points higher than those with "state farmer"--a substantial difference on a scale from about 10 to 90. Similarly, those

with "journalist" on them rated 23.8 points (i.e., 32.5-8.7) above those with "bookkeeper" on them, again controlling on party membership, education, and ethnicity. The range of the regression coefficients is substantial: from 0 to 45.4.³⁶ The rank order of occupations implied by the coefficients is, in ascending order: state farmer, driver, bookkeeper, salesclerk, secondary school teacher, journalist and lawyer (tied), and head of the city executive committee (abbreviated "mayor" in the table). Perhaps the only surprise to most Westerners will be the low rating of bookkeepers, who scored below salesclerks in this study, but 15 points above salesclerks in Treiman's Standard International Occupational Prestige Scale.³⁷ This can be largely explained by the fact that the Russian term (schetovod) presented to respondents denotes a low-level clerk who frequently works with an abacus, as opposed to a higher-level bookkeeper or accountant (bukhgalter).

Other occupations were rated in replications 2 through 5, with much the same results. The rankings implied by the coefficients seem reasonable. In replication 5, for example, occupations are ordered as follows: tractor driver, telephone operator, decorator, crane operator, auditor, army officer, chemical engineer, and professor.

Though no surprises surfaced in replication 5, the ratings of two occupations included in other replications deserve special mention. Mail carriers received the lowest rating of all occupations in replications 2 through 4--even lower than farm workers; this perhaps reflects their having to work in uncomfortable circumstances

(lack of mechanization, large apartment complexes, and bad weather) for very low wages.

KGB officers, on the other hand, received the highest ratings in replications 2 and 3--somewhat higher even than physicians. This high rating by no means indicates that emigrants like KGB officers, for they were not indicating their personal preferences. Rather, the rating seems to reflect the high influence and privilege enjoyed by officers of the KGB (not to be confused with rank-and-file agents). Evidence of their influence and privilege is provided by answers to a series of items in the core questionnaire, given to all 2,793 respondents. When asked to rank incumbents of nine occupations according to their influence (vliianie), respondents produced the following (ascending) order: collective farmer, worker in a truck plant, clerk in a department store, medical doctor, colonel in the army, professor at Moscow State University, manager of a large industrial enterprise, colonel in the KGB, and the first secretary of the oblast [provincial] committee [of the CPSU]. The ranking of privilege (privilegiia) was identical, except that the rank orders of professor and army colonel were reversed.

Let us now turn from the effect of occupation to the that of party membership. In replication 1 (Table 2), vignettes in which the hypothetical citizen was a CPSU member received ratings 9.6 points higher than those in which the hypothetical citizen was not a member--holding occupation, education, and ethnicity constant. Examining the coefficient for party membership in the other four replications (columns 2 to 5) reveals that they are all of similar

magnitude. Again, this does not suggest that respondents necessarily liked party members more than others, only that they perceived members as enjoying higher social status than others in the USSR, controlling on three other characteristics.

The coefficients for education tell much the story one would expect, with higher education conferring higher status. The fact that incomplete secondary education (lasting 8 years) supposedly confers less status than elementary education (lasting 3 or 4 years) should be overlooked because (1) the amount (-.2) is minuscule and (2) the more sensible pattern is manifested in each of the other four replications (columns 2 to 5). Similarly, the anomalous low score for higher education in replication 3 should be overlooked in view of its consistently high score in the other four replications.

However, the fact that secondary specialized school (lasting 12 years) brings somewhat less status than complete secondary education (lasting 10 years) should not be entirely overlooked: the same pattern is observed in all five replications. General secondary schools may offer a slight advantage because they serve more frequently than secondary specialized schools as the avenue to higher education. In any case, the differences between the coefficients for the three kinds of secondary education are rather small in all replications. They speak more to the similarity in status conferred by various secondary schools than to the disparity. In other words, the social status of people matched with respect to occupation, party membership, and ethnicity does not differ appreciably as result of the kind of secondary school they have attended. This,

however, does not mean that secondary schools have no bearing on social status. Since vocational schools lead to low-status manual occupations, and other secondary schools normally lead to higher-status non-manual occupations, differences in secondary schooling do exert an important indirect effect on social status.

Finally, consider the regression coefficients for ethnicity. The "-6.8" for Uzbeks means that, on the average, vignettes of Uzbeks scored 6.8 points below vignettes of Russians when they were matched with respect to occupation, education, and party membership. The decrement for Jews (about 12 points) is even more striking. Discounting a minor anomaly in column 2, the coefficients from all five replications yield the following ranking of the nationalities (in descending order): Russians, Ukrainians, Estonians, Uzbeks, and Jews. Again, it must be emphasized that these rankings do not concern the ethnic preferences of the respondents, but rather their perceptions of the social status enjoyed by the various groups. Furthermore, the rankings do not necessarily indicate that Jews have low status in the USSR. Although Jewishness per se causes a decrement in status according to these results, many Soviet Jews--despite widespread discrimination--manage to compensate with occupational and educational achievements.

Thus far, we have focused only on the magnitude of effects for each of the four attributes which were considered likely components of social status. Had this been the ultimate aim of the research, a much simpler research design could have been employed in which respondents simply rated occupations, party membership, education

levels, or ethnic groups (nationalities) singly instead of in combination with one another. However, such ratings would have been potentially misleading. For example, in such an exercise a low rating for Uzbeks might merely manifest the fact that on the average they have lesser jobs than Russians, and that lesser jobs, not ethnicity per se, bring lesser status.³⁸ The regression coefficients in Table 2 escape this potential criticism. The lower rating of Uzbeks obtained even when the vignettes were matched on the other attributes.

But another advantage of the regression equations is that they permit us to study the relative salience of the attributes. Notice that the coefficients for party membership, education, and ethnicity all have a range of 10 to 15 points at the extremes, suggesting that they are all roughly equivalent in salience. On the other hand, the coefficients for occupation vary about 40 points, depending on which replication one examines. In each of the replications, occupation appears three to four times as salient as any of the other attributes, but the other attributes still contribute appreciably to social status as judged by ordinary citizens.³⁹

All four attributes, then, figure into the synthetic gradation of social status in the USSR. This, however, constitutes only a partial analysis. Other potentially important attributes readily come to mind: earnings, gender, and place of residence, to name a few.⁴⁰ A follow-up study will incorporate these attributes into the design. That study will also address three other questions. First, to what extent do respondents' personal attributes impinge on their

judgments of social status? For example, do non-Jewish respondents rate ethnicity the same as Jewish respondents? Second, are there interaction effects among the attributes? Does earning a university degree, for example, confer the same status advantage to an Uzbek as it does to a Russian? Finally, to what extent are the results affected by the wording of the question put to respondents? The terms "social status" and "prestige" used in this study are more bookish in Russian than they are in English. The follow-up study will examine results based on the more common expression pol'zovat'sia uvazheniem ("to be held in respect").

Some Methodological Considerations

Before turning to the substantive implications of these findings, let us deal with two likely methodological objections. First, some will doubtless object that this study, by relying on an experimental design using vignettes of hypothetical Soviet citizens, bears little relation to Soviet reality. Others may object that the task was too hypothetical for Soviet citizens who, after all, have rarely experienced the level of psychological testing which most Americans experience. Granted, the task (which lasted about six minutes) was different than anything most respondents had previously experienced. However, as the high multiple-Rs in Table 2 indicate, the responses embodied a great deal of order--not the randomness one would expect from people responding to a meaningless exercise.

An even stronger argument can be made for the "reality" of these findings by comparing them with the character-of-work index developed by Shkaratan and his associates (discussed above). The

right-hand column of Table 3 reproduces their index for those occupations included in this study. The left-hand column presents comparable values from this study, based on partial regression coefficients for occupations (see the table notes). The correlation between the two is very substantial ($r=.88$). In other words, the occupational perceptions of the respondents corresponded greatly to the objective scale developed by an outstanding Soviet sociological team. This speaks well for the validity of these findings.

TABLE 3 ABOUT HERE

Much the same approach can be taken in addressing the second methodological objection--that results based on interviews with emigrants differ from those which would be obtained from normal Soviet citizens. Of course, the results in their entirety cannot be compared directly with Soviet studies, since no such studies have been conducted. However, it is possible to compare the results which pertain to occupations with the results of some uncommonly fine studies of occupational prestige conducted in the USSR. The relevant prestige scores from two such studies are reproduced in columns 2 and 3 of Table 3. Note that the prestige scores from the two Soviet studies correlate .88 with one another. The scores based on emigrants (column 1) correlate .92 with the scores from Kiev, and .81 with those from Leningrad. In other words, they are very comparable--especially taking into account the fact that the Soviet results were obtained from secondary school students rather than from adults, and were calculated in a manner which did not control for other factors contributing to social status. The available

evidence, then, demonstrates that emigrants' perceptions of occupations correspond to those of Soviet citizens. There is little reason to doubt their perceptions of other attributes.

Some Substantive Implications

From the standpoint of social science, the Soviet Union is perhaps best viewed as a social experiment in which certain conditions have been changed, permitting us to determine whether such changes produce interesting social consequences. As Soviet authorities would themselves claim, Soviet rule has effected monumental changes in the USSR's political and economic orders--changes that were expected to transform the social stratification system. The question remains: To what extent has the Soviet stratification system actually been transformed? Numerous scholars since Inkeles and Bauer have addressed this question by studying social inequality and mobility as well as possible with the limited data made available by Soviet sources. Yet, virtually no attention has previously been devoted to Soviet citizen's perceptions of their stratification system.

Understanding these perceptions, however, is obviously very important for several reasons. In the first place, the objective conditions of stratification--for example, the distribution of income and of occupational opportunities--often take on social significance by virtue of people's perceptions and evaluations of those conditions. In other words, it is one thing to document the objective features of the occupational distribution; it is quite another to demonstrate that people perceive the distribution and

weigh occupational differences heavily. Consider, for example, the changes in the Soviet occupational structure that now allow a greater proportion of the work force to perform so-called mental labor than was the case several decades ago. This study, by demonstrating that occupational information figures heavily in perceptions of Soviet social status, elaborates why the net upward mobility of the working population since the Revolution may have contributed to regime support. By the same token, it reveals the potential for disaffection should Soviet citizens' chances for upward mobility be blocked by a decrease in opportunities for professional advancement in a stagnant economy.

Understanding perceptions is also important because perceptions obviously play a role in social recruitment. An informed Soviet view on this subject was well expressed by Vladimir Shliapentokh more than a decade ago, in an article entitled "Social Prestige" (sotsial'nyi prestizh): ". . . efforts to acquire or maintain a high level of social prestige play an important role in individual motivation and in the activity of organizations. Social prestige encourages activities beneficial to the functioning and development of society."⁴¹ Status, like earnings, is a social reward that can attract people to functionally important tasks in a complex, achievement-oriented society; or it can instead attach to ascribed characteristics such as sex or ethnicity. The results of this study demonstrate that, in the USSR, status is conferred both on the basis of achievements (such as occupation and education) and ascribed characteristics (such as ethnicity). In pragmatic terms, this

represents a partial victory for the Soviet regime: whatever other problems beset their efforts to build a highly productive work force, at least people see high status in occupational and educational achievement. In ideological terms, however, it represents something of a failure. People obviously do not revere the working class, and they do still make social distinctions based on ethnicity.

There is, however, another more important sense in which these results could be considered an ideological disappointment to Soviet authorities. Surveying Western studies of prestige, some accomplished Soviet sociologists have concluded: "The antagonistic character of that [capitalist] society is reflected in the prestige scale [of occupations]."⁴² The results of this study do not set the USSR apart from the capitalist societies being criticized in conclusions such as these. Indeed, one is struck more by the similarities between Soviet and Western experience than by the differences. It would appear that industrialization and modernity exert a greater force than the unique features of Soviet state socialism.

Naturally, Marxists will object to the thrust of this argument because it seemingly ignores the paramount objective factor underlying their concept of stratification: people's relationship to the means of production. But the question of how best to describe a society, or to explain what goes on in it, ultimately requires that attention be given to empirical details. Surely, we may legitimately inquire whether the objective revolution in the Soviet Union's economic order has in fact affected its citizens' social consciousness.

Indeed, given Soviet authorities' oft-stated concern about raising "conscious builders of Communism," they themselves need to raise the same question.

FOOTNOTES

¹ I would like to thank Richard Dobson, Jack P. Gibbs, Deborah Narrigan, and Joseph Berliner for comments on a previous draft of this chapter.

² David J. Dallin, The Real Soviet Russia, trans. Joseph Shaplen (New Haven: Yale University Press, 1944), p. 95.

³ J. V. Stalin, Works, vol. 13 (Moscow: Foreign Languages Publishing House, 1955), p. 58.

⁴ In this chapter, "social status" means "relative standing in a prestige hierarchy." This usage should not be confused with the other sociological definition, in which the term means social position (e.g., father), with no connotation of rank.

⁵ Samuel Bowles and Herbert Gintis, Schooling in Capitalist America (New York: Basic Books, 1976), p. 128.

⁶ Junius B. Wood, "Russia of the Hour: Giant Battle Ground for Theories of Economy, Society, and Politics, as Observed by an Unbiased Correspondent," The National Geographic Magazine, L(1926): 519-98.

⁷ Leon Trotsky, The Revolution Betrayed: What is the Soviet Union and Where is it Going?, 5th ed. (New York: Pathfinder Press, 1972), 314 pp.

⁸ See, for example, the biography of Malcolm Muggeridge, who took a job as a correspondent in the USSR with the idea that he might settle there. Chronicles of Wasted Time, vol. 1 (London: Collins, 1972). Other like-minded notables included Sidney and Beatrice Webb, and Andre Gide.

⁹ Dallin, The Real Soviet Russia, pp. 87-185.

¹⁰ Alex Inkeles and Raymond A. Bauer, The Soviet Citizen: Daily Life in a Totalitarian Society (Cambridge: Harvard University Press, 1959), pp. 73-75. Using interviews with emigrants who left the USSR during the early 1970s, Zev Katz arrived at a very similar description of Soviet social structure in "Insights from Emigres and Sociological Studies on the Soviet Economy," Soviet Economic Prospects for the Seventies (Washington, D.C.: Joint Economic Committee of the United States Congress, 1973), pp. 94-120.

¹¹ Much Soviet work on stratification, especially that concerning social mobility, is beyond this chapter's scope. For a review covering both Western and Soviet research on stratification in the USSR through the mid-1970s, see Richard B. Dobson, "Mobility and Stratification in the Soviet Union," Annual Review of Sociology (1977): 297-329. For English translations of Soviet research, see Murray Yanowitch and Wesley A. Fisher (eds. and trans.), Social Stratification and Mobility in the USSR (White Plains: International Arts and Sciences Press, 1973); and Murray Yanowitch (ed.), The Social Structure of the USSR: Recent Soviet Studies (Armonk, New York: M. E. Sharpe, forthcoming).

¹² M. X. Titma, "Diskussii po problemam sotsial'noi struktury," Sotsiologicheskie Issledovaniia 1(1979): 72-77; and M. N. Rutkevich, "Sovetskaia intelligentsiia kak ob"ekt issledovaniia burzhuaznoi sotsiologii," Sotsiologicheskie Issledovaniia 3(1980): 206-18.

¹³ Konstitutsiia obshchenarodnogo gosudarstva (Moscow: Izdatel'stvo politicheskoi literatury, 1978), p. 111.

¹⁴ Both "intelligentsia" and sluzhashchie are often used in a more narrow sense than here. When the entire third social category is labeled sluzhashchie, the term "intelligentsia" often refers only to the subset of mental workers having education and expertise in science and culture. On the other hand, when the entire third social category is labeled "intelligentsia," the term sluzhashchie often refers only to low-level mental workers such as sales clerks and bookkeepers, as contrasted to specialists with higher education. No English term properly translates sluzhashchie, since it comprises not only white-collar workers, but some service workers as well; I shall follow the convention of translating it as "employee." It should be obvious, however, that "employee" does not mean "one who is employed," since manual workers and collective farmers are also employed, and many manual workers are salaried. I shall use quotation marks around the word "employee" whenever the word serves as a translation of sluzhashchie.

¹⁵ O. I. Shkaratan, O. V. Filippova, and L. G. Demidova, "Sotsial'nyi sloi i professiia," Sotsiologicheskie issledovaniia 3(1980): 26.

16 Konstitutsiia obshchenorodnogo gosudarstva, p. 119.

17 Sotsial'naia struktura sotsialisticheskogo obshchestva. 1970-1977. Bibliograficheskii ukazatel', vols 1 and 2.
Tallin: Institute of History of the Academy of Science of the Estonian SSR, 1980.

18 Rutkevich, "Sotsial'no-klassovaia struktura sotsialisticheskogo obshchestva," p. 24.

19 O. I. Shkaratan and V. O. Rukavishnikov, "Sotsial'nye sloi v klassovoi strukture sotsialisticheskogo obshchestva," Sotsiologicheskie issledovaniia 2(1977): 62.

20 To measure the content of work, they employ four indicators: 1) amount of routine activity entailed by the work; 2) administrative responsibility vested in the worker; 3) control over time at work and the sequence of work operations; and 4) education required by the work. To measure the socioeconomic conditions of work, on the other hand, they employ one indicator: the "mean socioeconomic value" of the work as reflected in earnings and housing provided by employers. Incidentally, their early work mentions yet another component of the socioeconomic conditions of work: "the social prestige (obshchestvennyi prestizh) of groups of people performing work of a given content." However, this component was dropped without explanation in later work. See O. I. Shkaratan and V. O. Rukavishnikov, "Sotsial'naia struktura naseleniia sovetskogo goroda i tendentsii ee rasvitiia," Sotsiologicheskie issledovaniia

2(1974): 39.

21 Shkaratan and Rukavishnikov, "Sotsial'nye sloi," p. 71-73. See also O. I. Shkaratan et al., "Kharakter vneproizvodstvennoi deiatel'nosti i sotsial'naia differentsiatsiia gorozhan," Sotsiologicheskie issledovaniia 4(1979): 104-10. For English translations, see sources given in footnote 11. A discussion of Shkaratan's early work appears in Murray Yanowitch, Social and Economic Inequality in the Soviet Union: Six Studies (White Plains: M. E. Sharpe, 1977). For similar work on class structure in rural areas, see the work of Iu. V. Arutiunian, discussed in these same sources.

22 Walter D. Connor, Socialism, Politics, and Equality: Hierarchy and Change in Eastern Europe and the USSR (New York: Columbia, 1979), p. 92; and David Lane, The End of Social Inequality? (London: George Allen and Unwin, 1982).

23 Of course, the attractiveness of occupations correlates with their prestige, but the conceptual distinction is important. See V. N. Shubkin, Sotsiologicheskie opyty (Moscow: Mysl', 1970) and Trudiashchaiasia molodezh' (Moscow: Nauka, 1984), pp. 73-89. For an English account of Shubkin's early work, see Murray Yanowitch and Norton T. Dodge, "The Social Evaluation of Occupations in the Soviet Union," Slavic Review 28(December 1969): 619-41.

24 V. V. Vodzinskaia, "O sotsial'noi obuslovlennosti vybora professii," pp. 39-61 in G. V. Osipov and Ia. Shchepan'skii (eds.) Sotsial'nye problemy truda i proizvodstva (Moscow: Mysl', 1969);

M. X. Titma, Vybor professii kak sotsial'naia problema (Moscow: Mysl', 1975); and V. F. Chernovolenko, V. L. Ossovskii, and V. I. Paniotto, Prestizh professii i problemy sotsial'no-professional'noi orientatsii molodezhi (Kiev: Naukova Dumka, 1979).

25 Great Soviet Encyclopedia, vol. 24 (New York: Macmillan, 1980), p. 510.

26 (London: Routledge and Kegan Paul, 1963), p.38.

27 See Robert W. Hodge, Paul M. Siegel, and Peter Rossi, "Occupational Prestige in the United States: 1925-63," in Reinhard Bendix and Seymour Martin Lipset (eds.), Class, Status, and Power (2nd ed.), (New York: The Free Press, 1966), p. 323. Statements were scored as follows: "excellent"--100; "good"--80; "average"--60; "somewhat below average"--40; and "poor"--20.

28 Ibid., p. 326.

29 Donald J. Treiman, Occupational Prestige in Comparative Perspective (New York: Academic Press, 1977). See also Matti Alestalo and Hannu Uusitalo, Prestige and Stratification: A Comparative Study on Occupational Prestige and Its Determinants (Helsinki: Societas Scientiarum Fennica, 1980).

30 Albert J. Reiss, Jr., Occupations and Social Status (Glencoe: Free Press, 1961), pp. 162-238.

31 See Peter Rossi and Steven L. Nock (eds.), Measuring Social Judgments: A Factorial Survey Approach (Beverly Hills: Sage Publications, 1982).

32 This is a direct translation of the Russian version read to respondents. The published English version of the entire questionnaire does not record a last-minute change made in the Russian version.

33 See, for example, Peter H. Rossi et al, "Measuring Household Social Standing," Social Science Research 3(1974): 169-90.

34 Since numbers like, say, 18.8 are easier to comprehend than numbers with more decimal places, like 1.88, this transformation puts the results on a more human scale without affecting substantive conclusions in the least. Standardizing each respondent's ratings adjusts for the fact that some respondents utilized the full scale (from 1 to 9) in assigning social standing while others utilized only a restricted range (e.g., from 3 to 7). A methodological defense of standardizing each respondent's ratings lies beyond the this papers' scope. Suffice it to say, standardizing in this manner increases the explained variance by roughly 50 percent (e.g. from 40 to 60 percent), which in this case constitutes prima facie evidence that the model does more justice to the actual process of making status judgments than the models which do not standardize.

35 In technical terms, multiple-R=.78. It should be emphasized that the data were analyzed at the individual level. Had the mean rating given by all respondents to each vignette served as the

dependent variable, as it does in many studies of this sort, multiple-R would have exceeded .90.

³⁶ Bear in mind that, in regression equations with design or dummy variables, a coefficient of 0.0 represents the category that has been chosen arbitrarily as the point of comparison. If journalist had been chosen to serve as the occupation with which other occupations were compared, it would have received a coefficient of 0.0, and state farmer would have received a coefficient of -32.5. Hence, the substantive conclusion would have remained the same: controlling on other variables, journalists were rated 32.5 points higher than state farmers.

³⁷ Donald J. Treiman, Occupational Prestige in Comparative Perspective (New York: Academic Press, 1977), pp. 235-260.

³⁸ Darrell Slider, "A Note on the Class Structure of Soviet Nationalities," Soviet Studies 37(1985): 535:540.

³⁹ In attempting to measure the relative salience of the four attributes, many social scientists would instead examine the unique variance explained by each of the attributes. However, in experimental designs, such an approach is illegitimate because the unique variance to some extent merely reflects arbitrary features of the research design chosen by the experimenter. Unstandardized regression coefficients such as those presented in Table 2 escape this criticism.

40 A pilot study based on 428 judgments from 16 respondents has suggested that earnings count heavily in perceived social status. However, earnings may well serve as a surrogate for occupation. These results will be explored in detail with the new data.

41 "Social Prestige," The Great Soviet Encyclopedia, vol. 24 (New York: Macmillan, 1980), p. 255. Since writing this article, Shliapentokh has emigrated to the United States, where he now spells his name Shlapentokh.

42 M. Kh. Titma, Vybor professii kak sotsial'naia problema (Moscow: "Mysl'", 1975), p. 143

Table 1

PRACTICE RATINGS OF THE SOCIAL STATUS OF TWO HYPOTHETICAL SOVIET CITIZENS

<u>First Vignette</u>			<u>Second Vignette</u>		
Tatar incomplete secondary not a CPSU member janitor			Russian higher education CPSU member professor		
RATING	FREQ.	PERCENT	FREQ.	PERCENT	
1 (low)	157	49.1%	0	0.0%	
2	57	17.8	1	.3	
4	13	4.1	1	.3	
5	18	5.6	13	4.1	
6	2	.6	22	6.9	
7	0	0.0	64	20.0	
8	0	0.0	52	16.3	
9 (high)	3	.9	135	42.2	
REFUSED	20	6.3	16	5.0	
DON'T KNOW	12	3.8	13	4.1	
MISSING	6	1.9	2	.6	
	<hr/> 320	<hr/> 100.0%	<hr/> 320	<hr/> 100.0%	
MEAN RATING		1.94		7.91	

Table 2

REGRESSION OF PERCEIVED SOCIAL STANDING ON FOUR ATTRIBUTES

Replication number	(1)	(2)	(3)	(4)	(5)
regression constant	27.4	23.0	27.9	27.5	24.5
OCCUPATION					
state farmer (<u>sovkhoznik</u>)	0.0			0.0	
collective farmer (<u>kolkhoznik</u>)					0.0
tractor driver (<u>traktorist</u>)		0.0	0.0		
driver (<u>voditel'</u>)	6.9				
crane operator (<u>mashinist kranov</u>)				1.7	7.6
telephone operator (<u>telefonist</u>)					4.0
shipping clerk (<u>ekspeditor</u>)		7.6	4.5		
decorator (<u>oformitel'</u>)					6.8
jeweler (<u>iuvelir</u>)		16.7	13.0		
bookkeeper (<u>schetovod</u>)	8.7			-3.7	
mail carrier (<u>pochtal'on</u>)		-1.5	-9.8	-7.4	
salesclerk (<u>prodavets</u>)	10.1				
journalist (<u>zhurnalist</u>)	32.5				
writer (<u>pisatel'</u>)		31.1	28.1	21.9	
HS teacher (<u>prepodavatel'sr.shk.</u>)	17.9				
auditor (<u>finansovyi inspektor</u>)					18.8
chemical engineer (<u>inzh.-khimik</u>)				14.5	27.8
physician (<u>vrach</u>)		30.1	25.0		
lawyer (<u>advokat</u>)	32.5			21.9	
economist (<u>ekonomist</u>)		22.1	21.2		
professor (<u>professor</u>)					44.1
army officer (<u>ofitser Sov. Armii</u>)					23.5
KGB officer (<u>ofitser KGB</u>)		34.3	33.8		
mayor (<u>predsedatel' GORISPOLKOMA</u>)	45.4			31.2	
PARTY					
nonmember	0.0	0.0	0.0	0.0	0.0
member	9.6	12.3	13.3	12.8	13.7
EDUCATION					
low	0.0	0.0	0.0	0.0	0.0
incomplete secondary	-.2	2.6	1.3	5.7	2.4
vocational	2.7	10.4	6.1	9.0	5.5
complete secondary	4.4	9.9	7.1	11.5	10.5
specialized secondary	3.1	8.1	4.8	10.8	7.9
higher	9.7	13.0	5.8	14.6	12.5
ETHNICITY					
Russian	0.0	0.0	0.0	0.0	0.0
Ukrainian	-3.2	-2.9	-3.3	-1.0	-5.0
Estonian	-5.6	-4.6	-5.0	-2.3	-5.4
Uzbek	-6.8	-5.5	-4.3	-6.7	-9.5
Jewish	-12.1	-14.7	-10.5	-10.9	-11.0
Number of judgments					
	(981)	(687)	(1893)	(1574)	(2514)
Multiple R					
	.78	.73	.72	.79	.75

(continued)

Table 2 (continued)

Eight occupational titles were included in each replication. Blanks for a given occupation indicate that the occupation was excluded from that replication. A "0.0" for an occupation indicates that the occupation serves as a point of reference, not that the occupation has no status (see the text). Note that regression coefficients for occupations should not be compared across replications unless the replications have the same point of reference.

Table 3

COMPARISON OF OCCUPATIONAL PRESTIGE SCORES FROM SOVIET STUDENTS AND EMIGRANTS

adult emigrants ¹ SIP	Kiev students ²	Leningrad students ³	"Character of work" index ⁴
11.2 mail carrier		4.6 pochta'lon	
21.9 tractor driver	-.02 traktorist	3.8 traktorist, kombainer	
22.4 state farmer	-.17 rabochii polevodcheskoi brigady	3.4 rabotnik polevodstva	2.7 ne- i malokval- ifitsirovannye raboch. sel. khoz.
26.2 bookkeeper	-.28 schetovod	3.1 bukhgalter, schetovod	4.5 shetovod-kassir
29.4 driver	-.13 voditel' trolleibusa	5.1 shofer	5.0 shofer gruzovika voditel'tramvaia, taksi
35.2 sales clerk	-.21 prodavets	3.0 prodavets	4.2 prodavets
49.7 HS teacher	.51 uchitel'	6.2 prepodavatel' sred. shkoly	6.4 prepodavatel' v shkole (tekhnikume)
55.3 army officer	.34 kadrovyyi ofitser	7.4 voennyi	7.3 ofitser armii
61.5 chemical engineer	.57 inzh.-geolog inzhener- radiotekhnik	7.3 nauchnyi rabotnik v ob- lasti khimii	7.0 inzhener- konstruktor, inzh.-tekhnolog
63.4 economist	.30 ekonomist	3.8 ekonomist- planovik	6.8 inzhener- ekonomist
74.7 doctor	.67 vrach	8.5 vrach	7.0 vrach
76.7 journalist			7.7 zhurnalist
85.2 professor	.75 uchenyi-fizik, kibernetik, medik, biolog	8.1 nauchnie rabotniki [10 subjects]	7.0 prepodavatel' v VUZe
100.2 mayor			8.0 otvetstvennyi partiinyi rabotnik

(continued)

Table 3 (continued)

¹This column lists the fourteen occupational titles in Table 2 which have also appeared in one of three important Soviet studies. In several cases, the occupational titles do not match exactly. Readers are free to judge the correspondence between job titles by examining the transliterations in Tables 2 and 3. Had the titles matched perfectly, the correlations discussed in the text might have turned out even greater. The numerical values in this column were calculated by (1) combining the regression coefficients for occupation in Table 1 (taking advantage of the occupations which appeared in more than one replication), and (2) standardizing the results to yield a mean of approximately 50 and a standard deviation of 26. The procedure employed to combine the coefficients in Table 2 gives slightly different results depending on which replication is taken as the starting point. However, the correlations with the values in columns 2 through 4 are scarcely affected by such differences.

²V. F. Chernovolenko, V. L. Ossovskii, and V. I. Paniotto, Prestizh professii i problemy sotsial'no-professional'noi orientatsii molodezhi (Kiev: Naukova Dumka, 1979), pp. 203-4. The values from their study "Va(b)" were used when possible. Otherwise, values from their study "IV(1973)" were used. In the latter case, .03 was added to their reported values to compensate for a scaling difference between their two studies.

³V. V. Vodzinskaia, "O sotsial'noi obuslovlennosti vybora professii," pp. 39-61 in G. V. Osipov and Ia. Shchepan'skii (eds.) Sotsial'nye problemy truda i proizvodstva (Moscow: Mysl', 1969). Values were read from a fold-out graph.

⁴O. I. Shkaratan and V. O. Rukavishnikov, "Sotsial'nye sloi v klassovoi strukture sotsialisticheskogo obshchestva," Sotsiologicheskie issledovaniia 2(1977): 68-69. The values reported here are the natural logarithms of their index values. Logarithms were taken to adjust for the fact that their index was computed by using multiplication.

Chapter Ten

Nationality Policy and Ethnic Relations in the USSR

Rasma Karklins

Survey research with recent emigrants from the USSR is valuable not only because it provides new data, it can be even more valuable as a means of determining the salience of one or another social science theory for the Soviet case. In assessing the applicability of comparative theories of ethnic relations and ethnopolitics it is necessary to look beyond statistical indices and formal arrangements to examine the informal political dynamics of a system and the subjective inputs of various political actors. Analysts of Soviet politics have traditionally had great difficulty in gaining access to evidence about informal politics, and it is here that the knowledge derived from research with former citizens of the USSR fills a crucial gap.

The insights on nationality relations provided by the Soviet Interview Project (SIP) General Survey and by my previous in-depth interviews with Soviet German emigrants in 1979¹ point to the relevance of theories about the instrumental value of ethnicity. As pointed out by Crawford Young (1983) there are two basic strands in comparative theories of ethnicity: "primordialist" and "instrumentalist". Primordialists emphasize the assumed relevance of the givens of a shared culture. In contrast, instrumentalists view ethnicity essentially as a weapon in the pursuit of collective advantage. Thus they stress the situational and circumstantial nature of ethnic solidarity and focus upon competition and interaction.² In other words, ethnicity becomes politicized not only in the sense primordialists would suggest, namely in the competition between alternative values and cultures, but also in the context of socioeconomic competition and the calculation of career threats and advantages. There have been a number of exponents of such theories (Shibutani and Kwan 1965; Hechter 1975), but the recent work of Joseph Rothschild (1981) stands out particularly.

These theorists argue that ethnic groups are concerned with the politics of manpower and tend to become interest groups in defense of particular advantages. Although ethnicity is used instrumentally in the pursuit of concrete goals, it

also colors the perceptions of the protagonists about what is just and about how their particular group is treated. To the extent that injustices are perceived, they will press even harder to change the distributive balance. To the extent that they see themselves as falling short of their goals, however, they will have political resentments against powerholders as well as ethnic resentments against competing groups.

It is contended here that these theories of ethnic socioeconomic and political competition are applicable to the Soviet Union and that they help explain numerous observed phenomena. Soviet policy has created a social context in which a person's official nationality is an important criterion for access to higher education, better jobs, and political positions. The policy has its origin in the twofold assumption that Russian cadre are most loyal to the central political system but that the loyalty of non-Russian nationalities can be enhanced by the pursuit of a modicum of proportional ethnic representation in selected areas. As a result, it has been the goal of Soviet nationality policy in the post-Stalinist era to have Russians dominate the politically most important positions in the USSR as a whole as well as in most non-Russian republics, but also to draw non-Russians selectively into political and economic administration.³ As first explicated by Zaslavsky (1980; 1982 ch. 5), the primary tool of ethnic cadre policy has been the inscription of all citizens' official natsional'nost' into their internal passports and other documents.

The differential treatment of various nationalities with regard to political and socioeconomic advancement is a sensitive issue and rarely discussed in Soviet sources. Typically, official Soviet statements touch on just two points. First, as stipulated in the Soviet constitution of 1977, "USSR citizens of different races and nationalities have equal rights..." and "any direct or indirect advantages for citizens on a racial or national basis... is punishable by law" (Art. 36). Second, other statements refer to the policy of promoting

proportional ethnic representation in state institutions and in the "building of scientific-technical cadre" (Ostapenko and Susokolov 1983: 10). As the history of other multiethnic societies shows, these two goals are frequently contradictory. Equal treatment for all implies that ethnicity is disregarded in the selection for jobs or education; proportional representation requires specific attention to ethnic identity. There exists a basic tension between the equal treatment of individuals and the equal treatment of groups. Emphasizing the latter implies the use of ethnic criteria for political and social upward mobility. This is in fact what we find in the USSR.

Although it is difficult to find contemporary Soviet references to the preferential treatment of Russian nationals, the preferential treatment of indigenous, non-Russian nationalities has been mentioned⁴ occasionally. Yet, even these references are vague. This paper will focus on the new insights provided by the SIP General Survey regarding regional differences and links between cadre policy and the quality of ethnic relations.

The analysis faces a major difficulty created by the ethnic preselection of the potential sample population by the Soviet emigration authorities. With few exceptions, only people with close family ties abroad have been allowed to exit the USSR; for the Soviet Interview Project the result is that most respondents are Jewish, with a small Russian subgroup. Although the composition of this sample constitutes a liability by limiting the possibility of generalizing findings to the entire Soviet population, it can also be turned into an advantage if an appropriate research strategy is chosen.

Two strategies are applied in this essay. The first focuses on the regional distinctions among union republics, hypothesizing that as the sample is basically the same no matter where respondents resided, regional variance in responses reflects the environments in which they lived. It will be argued, for example, that variance in evaluations of the quality of ethnic relations between

non-Jewish nationalities is less related to personal characteristics of the respondents than to actual differences between union republics. The second approach faces the possibility of ethnic bias directly and makes it the focus of an empirical test based on the partial ethnic diversity present in the sample.

REGIONAL DIFFERENTIALS IN ETHNIC EVALUATIONS

Ethnic Favoritism Toward Groups.

Until recently, scholars have analyzed the question of differential treatment of nationalities within the entire USSR and within individual union republics by focusing on official policy statements as well as on aggregate statistics about actual ethnic representation in various institutions (Hodnett 1978; Jones and Grupp 1984). Our data complement these studies by analyzing subjective evaluations of policy and its consequences as well as the correlates of differential evaluations made by subgroups of respondents.

Three survey questions asked about ethnic privilege in politics and in socioeconomic advancement in the union republic where each respondent last resided. The focus on the union republic level was deliberate because one can argue that the consequences of Soviet nationality policy are most pertinent in the republics, and that the non-Russian union republics provide the context for politically the most relevant ethnic relations between groups, namely between the titular nations and local Russians. The questions were: "In (R's REPUBLIC) during your last normal period, which nationality did you think was treated best in ...

a. access to government or party positions, or was everyone treated the same?

What about...

b. getting good jobs?

c. access to higher education?"

The first substantive finding is that few respondents (less than 10%)^a

replied that everyone was treated the same. While the low rate might be explained partly by the peculiarities of the sample as a whole, this could hardly explain differences within the sample about who was treated better. The pursuant analysis will focus on this internal variance in replies.

There is regional variance regarding the nationality viewed as receiving preferential treatment. As illustrated in Figures 1, 2, and 3, nearly all respondents

[Figures 1, 2, and 3 about here]

perceived that Russians were treated best within the USSR,⁶ but in non-Russian union republics, significant privilege applied to the respective titular nationalities. There are additional regional differences in the intensity of ethnic privilege given to locals: It is perceived to be high in Central Asia, the Caucasus, Moldavia, Lithuania and Estonia (note the small N which makes the last finding more questionable), middle-range in the Ukraine, and in Belorussia and Latvia the balance favors the Russians.⁷ In other words, while in most non-Russian republics the titular nationality is perceived as treated best, in Belorussia and Latvia Russians are seen as holding an equal or even superior position.

The response pattern shows significant regional differences, but variance between the three fields of ethnic access is much less pronounced. A comparison of Figures 1, 2 and 3 shows that the strength of the respective ethnic privilege varies only slightly between political positions, jobs, and higher education. In non-Russian republics Russians are least likely to be mentioned as a preferred group if one asks about access to higher education and most likely to be mentioned if one asks about positions in government and the party. However, the "local republic nationality" is also dominantly cited as being preferred in government and the party, and, except for Belorussia and Latvia, more so than

Russians.

The role of nationality in political access and regional variation in the identity of the preferred group are seen also in replies given to a topically related question asked of a different subset of respondents. The first question asks directly whether any nationality was treated better in regard to access to government or party positions. The second question focuses only on the party and is formulated more generally: "In (end of LNP) did you feel that all people had about the same chance of being asked to join the party, or that some people were more likely to be asked than others?" In reply, 10% felt that "all have the same chance", 79% chose "some more likely than others," and 11% said they did not know.

Even though we are dealing with a different subsample, and even though the question is formulated differently and focuses only on membership in the CPSU, the overall thrust of these responses is similar to that of replies to the question about access to party and government positions. Roughly 10% of each group says that all people are treated equally or have no view to express, and about 80% feel that differentiations are made.

Respondents who mentioned differential treatment in recruitment to the party were asked to evaluate the importance of various factors; nationality was chosen most frequently by far, with class emerging as second in importance (see Table 1). Further replies show that, on an unionwide level, Russian nationals

[Table 1 about here]

are most likely to be recruited into the CPSU. Republic nationalities are second most likely. On a regional level, however, differentials similar to those found in the question about access to government and party positions appear: Within the RSFSR, Russians are overwhelmingly seen as the most likely party recruits; in Belorussia, Latvia, and this time the Ukraine, Russians emerge as holding a

slight edge (33%), with the republic nationality a close second (30%). In all other non-Russian union republics, the titular republic nationalities are perceived to have the easiest access to the CPSU. Even in this case, however, Russians are mentioned more frequently than in replies about both government and party, which suggests that the locals are more likely to be recruited to government than to party positions.

Overall, the differentials found in these macro-level evaluations of ethnic policies are plausible. Government positions are more visible and are therefore well-suited to demonstrate the participation of indigenous nationals in politics. Government positions also tend to be more ceremonial and to wield less power than party positions. As concerns regional differentials, the dominant role of Russians in Latvia and especially in Belorussia is confirmed by other sources.⁴ So is the quest for "affirmative action" by the Central Asian nationalities who have in the past been significantly underrepresented in the higher ranks of administrators in their republics.

Although survey results seem to reflect political realities in the individual union republics, it is also likely that assessments are affected by the characteristics and experiences of respondents, and we must test for this influence. The replies about access to both party and government positions are used as a test. Focus is on the non-Russian region as a whole and on a simplified response pattern that differentiates between respondents who perceived a preferential treatment of the republic nationality and those who did not.⁵

Respondent nationality is the first variable examined, but conclusive findings are unfortunately impeded by the ethnic composition of the sample. There were four types of responses to the question: 1) no nationality is treated better than any other; 2) Russians are treated better than everyone else; 3) titular republic nationalities are treated better; 4) everyone except smaller and/or dispersed groups is treated better. In order to test empirically for

ethnic bias one should have data for all relevant groupings -- Russians, non-Russian republic nationals, and individuals who belong to a smaller and dispersed group. The Soviet Jews are a good proxy for the latter, and there is a sizeable group of Russian respondents from the RSFSR, but titular nationalities and Russians living outside of the RSFSR are underrepresented. Even though the marginals are small, Table 2(A) lists the latter two groups separately in order to show the thrust of replies. As may be seen, the clearest finding is that,

[Table 2 about here]

compared to Russians and Jews, non-Russians in the "Other" category are least likely to say that republic nationalities are treated better. Since most of these respondents belong to republic nationalities, this suggests a tendency to de-emphasize the advantages of one's own group. This same tendency is found among Russian respondents from the RSFSR, who were the least likely to say that Russians are treated better than others.¹⁰ If the sample had been more diversified ethnically, results more likely than not would have shown even more divergent interpretations. The replies for Estonians seem, for example, highly problematic.

All respondent subgroups agree that the ethnic privilege of republic nationalities is most pronounced in regard to political positions, but the Russian subsample emphasizes this most clearly. Even though this is again suggestive of the significance of nationality, the sub-sample of non-Jewish respondents is too small to draw definitive conclusions.

The data are more reliable when other respondent characteristics are examined. Thus both a higher level of education and a self-declared "interest in politics" are associated with the belief that republic nationalities receive preferential treatment (see Table 2 B and C). This suggests that ethnic privilege is more evident to more educated and politically involved observers.

Job satisfaction also influences the pattern of responses significantly. People who did not work during their LNP were the least likely to say that republic nationalities were treated best (Table 2 D). Among those who were working, however, individuals who were satisfied with their jobs were the most likely to say that no nationality was treated better in access to government, jobs, or education. Also, in the non-Russian republics, decreasing levels of satisfaction with one's job are associated with an increasing emphasis on the statement that the republic nationality was treated best in all three areas, and especially so in government and party positions. This finding can be interpreted in several ways. The interpretation most closely in accord with the arguments of theorists of comparative ethnic relations and Soviet ethnosociologists is that job dissatisfaction is easily projected into general ethnic discontent or the perception of favoritism toward other groups.¹¹ But the causal chain could also be reversed, with favoritism toward the republic nationalities leading to higher levels of job dissatisfaction on the part of those who feel left out. Whatever the explanation, it appears that a politically interesting association between ethnic policy and economics exists in the USSR.

In summary, there is evidence that some characteristics of respondents affect their replies, but with differing intensity. As is suggested by Table 2, respondent nationality may be most influential, but our sample does not allow a clear conclusion about it. The data are more conclusive in pinpointing regional differentials of the extent to which Russians or union republic nationalities are perceived to receive preferred treatment in access to political and socioeconomic positions.

Trends in the Quality of Nationality Relations.

Relations between nationalities can be conceptualized as taking place either on an individual or a group level. Group-level relations are more affected by

policy and are therefore more susceptible to fluctuations over time. In order to evaluate trends of the late 1970s -- the primary period of reference for our respondents -- the survey asked: "Would you say that relations among non-Jewish nationalities in (R's REPUBLIC) were improving, getting worse, or staying about the same during your last normal period?"

The quality of group ethnic relations in the Soviet Union as well as in other societies is influenced not only by longstanding characteristics of societies, such as their history and the closeness of cultural identity among the groups in contact, but also by changes in cultural and socioeconomic competition and in the perceptions of equity of politics (Glazer and Moynihan 1975; Azrael 1978; Rothschild 1981; Karklins 1986; ch. 2). As one thinks about individual regions of the USSR along these dimensions, and if one interprets "relations among non-Jewish nationalities" to refer to relations between the titular nations of the non-Russian republics and the local Russians, one would expect to find increasing strains in the Baltic and Central Asian areas, followed with lesser severity by the Caucasus, the Ukraine, Moldavia, and Belorussia.

As may be seen in Figure 4, this regional ranking is confirmed by our

[Figure 4 about here]

survey data, with two exceptions. The Caucasus emerges as decreasingly conflict-ridden, whereas Moldavia stands out as increasingly conflictual. Both these unexpected ratings are problematic because of the small numbers of respondents, but substantive explanations may also be found. There are comparatively few Russians in Armenia, Georgia, and Azerbaidzhan, and thus the statement, "relations are staying about the same," is plausible. As noted below, Moldavians appear for their part to react especially negatively to recent pressures on native culture.

Figure 4 shows that 56% of respondents who had lived in the RSFSR said that

relations among nationalities were getting worse. This high rate is surprising and suggests that relations among the Russians and the other nationalities living within the RSFSR are more strained than the existing literature leads one to expect. Pressures on non-Russian cultures within the RSFSR appear to explain rising ethnic strains. Yet, it is also conceivable that respondents thought the question referred to the entire Soviet Union, and not just the RSFSR.

As to explanations why nationality relations are worsening in various regions, respondents had a chance to explain in a follow-up question. Most chose a reply about "growing pressures to forget traditional languages and cultures among non-Russians" (41%); others said "there was more competition for jobs and privileges" (28%); and a small group chose "material conditions among nationalities becoming more unequal" (10%). Looking again at regional distributions, one finds that the last reply category was most frequently given in regard to the RSFSR. The pressure to forget non-Russian cultures was most often cited for the Baltic republics and Moldavia (closely followed by the RSFSR), whereas job competition stands out in Central Asia and in the Ukraine.

This pattern of replies is plausible. Since the mid-1970s, pressures against minority languages have accelerated (Solchanyk, 1982) and have weighed most heavily on those nations such as the Balts whose identities revolve around distinct languages and cultures. Other sources confirm that the volatility of ethnic socioeconomic competition has increasingly emerged at the forefront of ethnic politics in Central Asia (Lubin 1981; Karklins 1986), and it was highlighted for the Ukraine already in the 1960s (Dzyuba 1968).

Again one has to test how respondent characteristics may have affected their evaluations. The next section deals with this question systematically.

THE ROLE OF RESPONDENT NATIONALITY IN ETHNIC EVALUATIONS

Survey research by its nature focuses on the subjective experiences and

evaluations of respondents. The extent and significance of ethnic subjectivity is assessed here in two ways. First, I shall measure the relative impact of ethnic variables on respondents' replies by comparing it to the impact of general demographic variables, political profiles, and job satisfaction. Second, I shall test the hypothesis that the impact of what I call "ethnic profile variables" differs depending on the question asked and is more intense in micro-level, respondent-related, ethnic evaluations than in macro-level evaluations of general ethnic trends in society. My supposition is that in the latter case respondents tend to take on the role of neutral observers, whereas in the former personal involvement is more influential.

Two survey questions are used to test these theses. The test question for micro-level evaluations is whether the respondent mentioned problems of nationality as a reason for emigration. Where this was the case (42% of the sample), respondents typically mentioned anti-Semitism and discrimination they themselves or family members had experienced or wanted to evade in the future.¹²

The core question about group-level ethnic relations in the USSR is whether relations among the major nationalities are improving or deteriorating over time. This is taken as the test question for macro-level evaluations, as its wording deliberately underlined relations among non-Jewish nationalities, thus putting both Jewish and other respondents into observer roles. To recapitulate, the question asked, "Would you say that relations among non-Jewish nationalities in (R's REPUBLIC) were improving, getting worse, or staying about the same during your last normal period?" Responses for the entire USSR show that 2% thought that they were improving, 50% thought that they were getting worse, 42% said they were staying the same, and 6% did not know or had not thought much about it. Since the latter group of respondents is basically neutral in its evaluation, and since only 2% saw an improvement, these replies are merged with the "staying the same" category, transforming our test question into a dichotomous variable with a

50/50 frequency distribution.

Thus we arrive at two replies treated as dichotomous dependent variables, and we want to compare how they are affected by several independent variables. The latter form three subgroups: demographic variables (sex, age, and level of education); ethnic profile variables (respondent's nationality, nationality of respondent's spouse and best friend, and interethnic attitude score); political profile variables (interest in politics, politics as a motive for emigration, and job satisfaction). These groups of variables are analyzed first separately and then collectively. My working hypothesis is that ethnic profile variables will have the strongest influence on the measure of discrimination because it is directly related to personal ethnic identity, and that the political profile variables will have the most influence on answers about the status of group ethnic relations, as this relates more closely to general public affairs.

The two questions studied are dichotomous, which means that findings about correlates of one of the two responses are implicitly findings about the other response. For the sake of simplicity (note especially Tables 3 to 7) the pursuant analysis focuses on the responses citing personal ethnic discrimination and on responses mentioning a worsening in ethnic relations among non-Jewish nationalities.

Demographic Variables.

Looking first at the demographic variables and the three-way crosstabulations in Table 3, we find that the differentials are small and are inconsistent in sign.

[Table 3 about here]

If one ignores the latter and calculates the relative effects¹³ of the three variables on the perception of discrimination, it emerges that age is the least

influential (with an average percentage difference of 3.5), followed by education (5), and sex (7.5). In other words, there is a very small difference in replies if one controls for age, and somewhat more if one controls for education (with the less educated tending to mention discrimination more, except for higher educated males). Sex is the most influential in that males cite discrimination more often. In the case of evaluations of group ethnic relations, differentials are larger. Nevertheless, age again has the least pronounced influence, although younger individuals see a worsening of relations more often than any other group except older males. Males more frequently see a worsening of relations, and so do the more educated.

Being younger, male, and more educated are correlated with having more interest in public affairs, thus it is conceivable that the latter is truly the "independent" variable determining evaluations of trends in nationality relations. Tests show, however, that higher levels of education remain associated with more negative evaluations of group ethnic relations, even when one controls for self-declared "interest in politics".

Ethnic Profile Variables.

Three ethnic profile variables are used: nationality of respondents, and one score each for behavioral and attitudinal ethnic preferences. Each of these variables presents some complexities, but they are nevertheless useful measures of ethnic identity.

Three subcategories are used for respondents' nationality, namely "Jewish Only", "Mixed Jewish" and "Russian or Other". It would of course theoretically be preferable to have more subcategories, especially for non-Russians/non-Jews, but, unfortunately, they are only minimally represented in the sample. I do, on the other hand, analyze separately those respondents who, according to self-identification and their official passport identification, were in part

Jewish and in part belonged to another nationality (usually Russian).¹⁴

The "ethnic affiliation score" measures behavioral ethnic preferences in the choice of spouses and closest friends. The proposition to be tested with this score is that respondents' ethnic evaluations and perceptions are influenced by the nationality of their closest personal affiliates. Persons affiliated only with members of their own nationality tend to focus more on their own group's concerns; those who have a spouse or best friend who is of another nationality than their own empathize more with the concerns of other nationalities. In other words, it is assumed that this score provides a behavioral measure of ethnocentricity.

The ethnic affiliation score is constructed to indicate the congruence of respondent nationality and affiliate nationality: a score of 2 indicates that both spouse and best friend are of the respondent's own nationality,¹⁵ a 1 indicates that either the spouse or the best friend is of the respondent's nationality, and a 0 indicates that neither the spouse nor the friend is of the same nationality as the respondent.

It is typical that the affiliates are of the respondent's own nationality: a majority of the Jewish (59%) and mixed Jewish (52%) respondents have both a Jewish spouse and best friend. In contrast, only 31% of respondents who are "Russian or Other" have both affiliates of their own nationality; the 0 and 1 scores are more heavily represented (24% and 44%). This nearly always means that one or both affiliates are Jewish. In the case of Jewish respondents, a non-Jewish spouse or friend usually refers to a Russian. It is rare that any respondent had affiliates who were other than Jewish or Russian.¹⁶

When one looks at relationships among the ethnic affiliation score, respondent nationality, and the two types of ethnic evaluations, (Table 4) and

[Table 4 about here]

examines those respondents who cited ethnic discrimination as a motive for emigration, one notes that the incidence of discrimination is highest among those who were "Jewish Only". It is second highest among the mixed Jews, and lowest among Russians and others. Russians and others mention discrimination most frequently if they have an ethnic affiliation score of 0, e.g., if both their spouse and friend were not of their own nationality. Since this is another way of saying that their closest affiliates were Jewish, the finding is logically in accord with that for the other respondent subgroups who show that individuals with more Jewish affiliates report discrimination more often. The percentage differentials are quite large both among the three nationality categories and among the subcategories of the ethnic affiliation score, thus supporting the proposition that respondent nationality and having a Jewish spouse and/or best friend are related to the experience and perception of ethnic discrimination against oneself or one's family.

By comparison, the percentage difference between subcategories of respondents is lower in their replies about trends in ethnic relations among non-Jewish nationalities, even though there again is a correlation, especially with the ethnic affiliation score. Respondents with a score of 0, indicating that neither their spouse or best friend was of their own nationality, have the lowest incidence of reporting ethnic strains, whereas those with a score of 2 have the highest rates. Those who are most ethnocentric in their behavior tend more often to perceive strains in ethnic relations, perhaps because of their subjective outlook on these matters. Alternatively, one could argue that individuals associating more with members of their own nationality may have lived in environments where a premium was put on affiliating with one's own ethnic group, and that it is in this context that ethnic relations in the USSR are worsening.

While the "ethnic affiliation score" measures personal behavioral

preferences, the "ethnic attitude score" measures attitudinal ethnic preferences. It is a summary score derived from a series of questions about the desirability of intermarriage and ethnic interaction at work. We asked whether during the LNP it was "desirable", "undesirable", or "made no difference" for a close relative to marry a Russian, Armenian, Latvian, Uzbek, Ukrainian, Jew, or a Buriat; similarly we asked whether the respondent had had any preference among these nationalities for coworkers or immediate supervisor. Altogether, respondents gave twenty-one answers in this series.

The ethnic attitude score summarizing the responses can be constructed in several ways. Since the focus here is on the general role of ethnic preference or rejection, it is most appropriate to count the times that the "it made no difference" reply was chosen. Saying so consistently all 21 times indicates total indifference to the ethno-religious identity of social partners and a score of 0 is assigned to the respective respondents (23%). If the "no difference" category is chosen less often, people tend to express a single preference -- usually for intermarriage with their own nationality -- and a varying intensity of rejection of the alternative partners mentioned in the question series. If the rejection rate is low, this is indicated by a score of 1; if the rejection is high, the score is a 2.¹⁷

Although not emphasizing the point, some Soviet sources have shown that nationalities differ in the extent to which ethnic preferences are expressed, especially regarding intermarriage. A study conducted in Moldavia shows that while 53% of Jewish respondents stated that it made no difference whether close relatives married individuals of another nationality (and implicitly religion), the rate for Russians was 76% and for Moldavian respondents 65% to 70%.¹⁸ Comparable ethnic differentials are found in our data; the respondents who are "Jewish Only" have the lowest percentage of people with an ethnic preference score of 0 (18%), followed by the mixed Jews (25%), and then the Russians and

Others (49%). Thus, nationality is significantly associated with the intensity of personal ethnic preference and rejection. Taking account of this, the crosstabulation between the ethnic attitude score and the ethnic evaluations under study controls for respondent nationality.

[Table 5 about here]

As illustrated in Table 5, personal ethnic preferences for partners in work and marriage are somewhat associated with differential comments on ethnic policy, but the strength of the association differs according to the question. Compared to comments about discrimination, percentage differentials are smaller between subgroups noting the worsening of ethnic relations in society. In the latter case, there is little variance between the three nationality subgroups, and there is no consistency in the direction of the association with the ethnic attitude score. Thus, it has just about no effect on the mixed Jewish group's responses, and it deflates the rate of "getting worse" responses among those Russians and Others who have the highest preference/rejection score (although the small N makes this finding unreliable). However, among the numerically most reliable group, those who are "Jewish Only", the incidence of the perception of a worsening of ethnic group relations increases with an increase in the ethnic preference/rejection score. This is worth noting, although one should beware of causal interpretations; it is equally possible that respondents have a higher preference/rejection score in regard to their partners' ethnicity because of a worsening climate in general ethnic relations, or that they note a worsening of ethnic relations because of their own attitudes. More likely than not, the flow of causation goes both ways, or is due to a common underlying factor not identified here.

The most dramatic increase in the frequency of comments about Anti-Semitism and ethnic discrimination is notable between Jewish and mixed Jewish respondents

with an ethnic attitude score of 1, as compared to members of the same groups who scored 0. In other words, those individuals who said that the ethnicity of their social partners made no difference to them show the lowest rate of comments about discrimination they experienced. Again, this can be interpreted several ways. It could mean that people who are indifferent to ethnic distinctions are less likely to experience or perceive discrimination against themselves, or alternatively, it can be interpreted as a reflection of a social environment which paid little attention to ethnicity.

The other major differential in responses about discrimination concerns the respondents' nationality; it is least often mentioned by "Russians and Others", followed by mixed Jews, and those who are "Jewish Only".

The examination of a multiple regression with all three ethnic profile variables further illuminates their relative effects on the two ethnic evaluation questions. Using a stepwise regression, with the discrimination statement as the dependent variable, "nationality of respondent"¹ enters first in the equation, the ethnic affiliation score enters next, and is followed by the ethnic attitude score. In contrast, only one variable -- the ethnic affiliation score -- enters into the equation when the evaluation that relations between non-Jewish nationalities is worsening is taken as the dependent variable. These findings support the thesis that the impact of the various ethnic characteristics differs depending on the questions asked.

Political Variables and Job Satisfaction.

Considering the nature of the two ethnic questions under study -- the perceptions of ethnic discrimination and the quality of group ethnic relations -- it is theoretically reasonable to assume that the political outlook and economic satisfaction of respondents influenced their replies. Thus, both questions relate to politics and are likely to be answered differently by individuals who

are involved in politics with specific political views and by individuals who do not. Similarly, both questions have economic implications. Ethnic discrimination frequently refers to a lack of socioeconomic advancement, and the worsening of ethnic relations often is related to group economic competition. Other research has shown that there is a tendency for individual feelings of job satisfaction to be projected into assessments of micro- and macro-level ethnic relations.²⁰

Two questions are used here to gauge the political profile of respondents. The first is the classic question about "interest in politics" asked in numerous comparative surveys. Crosstabulation of this variable with our two dependent variables shows that there is a significant association, and that it is stronger in the perceptions of worsening ethnic relations ($r = -.2047$) than in the statements about discrimination ($r = -.1305$). This differential is not surprising, for the question about the status of overall ethnic relations among non-Jewish nationalities in various union republics is more closely related to general public affairs than is a question about personal experiences of ethnic discrimination.

I also examine a rough indicator of respondents' political attitudes towards the Soviet system; whether they did or did not mention politics as a motive for emigration. Since the emigration question was open-ended and respondents could cite up to three motives, one may assume that people with critical political attitudes toward the regime would have mentioned it here if at all (41% of the sample did). This political disenchantment measure also correlates with the two ethnic evaluations, but less strongly than the "interest in politics" variable. Thus the discrimination statement has a $r = -.0951$, and the "ethnic relations are worsening" variable shows a r of .1246.

Similarly, simultaneous crosstabulation with both political variables (Table 6)

[Table 6 about here]

indicates that the "interest in politics" variable is unidirectional and the more decisive. A calculation of the relative effects of the interest variable on the two ethnic variables shows an average 14% differential in both cases, and in both instances the direction of the influence is toward a higher incidence of statements about ethnic discrimination and about worsening of nationality relations among those respondents who were more interested in public affairs. In contrast, the political disenchantment variable shows weaker and more complex associations. Respondents who are more critical of the system emphasize the worsening of ethnic relations more (average percentage difference is 8%), but the direction of the relationship is reversed for individuals mentioning ethnic discrimination (the average percentage difference is 6.5%). While the latter partly may be due to the nature of the data (both the statement about discrimination and political disenchantment are derived from stated emigration motives and thus are, to a minor extent, mutually exclusive), this hardly affects the overall thrust of the finding that political disenchantment does not appear to be a major explanatory variable for statements about ethnic discrimination. In contrast, political disenchantment is partly associated with the perception of a worsening of ethnic relations among the major nationalities.

[Table 7 about here]

Turning to the impact of job dissatisfaction, one finds that those respondents who were dissatisfied with their jobs tend to cite the existence of ethnic discrimination more often than those who were satisfied. The association is less pronounced and counter-directional in the case of comments about a worsening of nationality relations. As Table 7 also shows, job dissatisfaction is less influential than interest in politics in the case of a worsening of

ethnic relations, but is more influential in the case of the discrimination statement.

Summary and Multiple Regression with All Variables.

So far my analysis of correlates of the two ethnic perceptions may be summarized as follows: the three demographic variables, -- sex, age, and level of education, -- show no significant association with statements about discrimination, and, except for education, they show only slight associations with the statement that "nationality relations are worsening". The correlation with higher education appears to reflect strained group ethnic relations in more highly educated circles, a finding which is in accord with comparable research on the USSR. It is also found in other multiethnic societies such as Quebec where French-Canadian managerial and professional people show a positive correlation between education and nationalism (Hargrove 1970).

As for the USSR, Soviet ethnosociologists have noted that higher educational levels tend to go hand in hand with intensified ethnic consciousness (Arutiunian 1969; Susokolov 1976), and the "Harvard Project" of the early 1950s found that Ukrainians in whitecollar jobs were more hostile to Russians than were peasants and workers. The analysts related this to both the more intimate contact between Ukrainian and Russian whitecollar workers as well as to the higher degree of direct competition for more favored positions (Inkeles and Bauer 1959: 364-365). Similarly, West German scholars Kussman and Schafer (1982: 175) found that younger and more highly educated Soviet German emigrants evaluate Kazakh attitudes towards Russians the most negatively.

Among the three ethnic profile variables, respondent nationality is most strongly associated with the discrimination statement, followed by the ethnic affiliation score and then by the ethnic attitude score. In contrast, only the ethnic affiliation score has a noticeable association with the evaluation of

nationality relations, showing that respondents who tended to associate more with members of their own nationality mentioned a worsening of relations more often.

Among the three sociopolitical variables, "interest in politics" generally is the most influential, followed by job dissatisfaction (in the case of the discrimination statement), and political disenchantment (in the case of the perception of nationality relations).

These findings are confirmed by a stepwise multiple regression. Examining the impact of all independent variables at once provides a better notion of their relative standing.²¹ Thus, five variables enter the equation explaining the discrimination statement: nationality of respondent is first, followed by interest in public affairs, ethnic affiliation score, ethnic attitude score, and job satisfaction. In contrast, only four, partly different variables enter the equation related to the statement about a worsening of group-level nationality relations. This time interest in public affairs comes in first, followed by the ethnic affiliation score, level of education, and a political motive for emigration. This suggests that the kind of variables associated with micro- and macro-level ethnic evaluations do indeed differ.

In the case of macro-level assessments, interest in politics, general political outlook, and level of education are among the most significant influences, together with just one ethnic profile variable: intensity of association with one's own group. In contrast, micro-level ethnic evaluations are more strongly associated with the three ethnic profile variables analysed: respondent's nationality, the ethnic affiliation pattern, and ethnic attitudes. Among the other variables, interest in public affairs and job satisfaction play an additional role.

CONCLUSIONS

This paper has aimed at presenting the major findings of the SIP General

Survey on Soviet nationality policy and ethnic relations, and to do so within the context of a discussion of the association between respondent evaluations and the environments and individual characteristics they reflect. I conclude that the latter have a variable impact, depending on the question asked. If an ethnic assessment focuses on the micro-level of personal experiences, the impact of respondent nationality and other ethnic profile variables is considerably more significant than if the question focuses on macro-level relations between nationalities within entire republics. If the latter is the case, political awareness and outlook, level of education, and the ethnic affiliation pattern are decisive. Responses about the preferential treatment of ethnic groups within individual union republics correlate with political interest, level of education, and job satisfaction.

Furthermore, macro-level ethnic assessments vary according to the region in which respondents lived. Regional variance remains noticeable even when one controls for other variables that might explain individual statements. There is, thus, every indication that the variance reflects actual regional differences within the USSR rather than idiosyncracies of the sample or of subgroups within it.

The most significant substantive and theoretical conclusion is that a policy that treats ethnicity as a criterion for socioeconomic and political advancement contributes to ethnic strife. When asked directly about reasons for a worsening of ethnic relations among the major nationalities in their republics, many respondents pointed to increasing competition for jobs and privileges. However, it is worthwhile also to test whether the perception that "nationality relations are worsening" is indirectly related to responses that republic nationalities are favoritized. If one takes the evaluation of the group treatment of nationalities as the dependent variable, one finds that its association to the overall assessment that ethnic relations are worsening is

[Table 8 about here]

stronger than its association with the statement that relations are staying the same. As Table 8 illustrates, the correlation is just about equally strong in regard to all three subareas of ethnic privilege. In all three instances, a significantly higher perceived rate of a worsening in ethnic relations is linked to perceived preferential treatment of local nationalities.

What does this mean for Soviet nationality policy and developments? As we are dealing with an ethnically unrepresentative sample, conclusions have to be drawn with caution. At a minimum, one can say that from the perspective of an extraterritorial nationality such as the Soviet Jews, and from the perspective of Russians living in non-Russian union republics to a degree also, a worsening of the ethnic climate is associated with the socioeconomic favoritism of republic nationalities. Other data confirm that socioeconomic competition has increasingly emerged at the forefront of ethnic politics in various regions.²² Local assertiveness in these matters is especially high in Central Asia and Kazakhstan, leading to considerable resentment by Russians and other Europeans who have migrated there, who now feel that they are exposed to "reverse discrimination". On the other hand, locals do not appear to be satisfied either, for they judge their gains too small and believe that they are entitled to a dominant position in "their own republic" (Karklins 1986). Thus, a policy of socioeconomic privilege for the locals -- or the "nativization" of cadre -- appears to have been only partially integrative, at best. Local nationalities have a different perception of the situation and rarely react with gratitude or increased loyalty. More importantly, this policy tends to irritate ethnic groups who do not profit from it, including the Russian nationals. Resentment, as well as the generally increased awareness of nationality as an asset or liability for social mobility, creates new ethnic strains.

Why this is so can be explained both by comparative theories about the instrumental value of ethnicity in competitive situations and by a consideration of the resultant political context. A policy that uses ethnic criteria for socioeconomic and political advancement pits one ethnic group against the other and contributes to ethnic strains, especially if, as usual, available resources are limited. As noted by Teresa Rakowska-Harmstone (1977: 86), members of ethnic elites tend to promote local cadre for positions throughout the republics, squeezing out Russians, and the Russians fight back: "... political preference now works both ways, in favor of local candidates as much as immigrants, depending on who controls the hiring, and at what level -- a tug of war which is another source of growing ethnic conflict." Although cadre competition has affected Soviet nationality policy from its inception (Connor 1984: 277-286), it has been accelerating in the 1970s (Zaslavsky and Brym 1983).

Yet, the problem revolves not only around ethnopolitical competition. The political divisiveness of any type of ethnic favoritism is heightened by each group's reference to different moral and political principles and claims. Thus, members of non-territorial nationalities who in the contemporary USSR are not favored in any context argue that any reference to group identity is discriminatory and that all citizens should be treated equally as individuals. This argument is usually convincing to Western observers, since in the Western political tradition the dominant view of equality is individualistic. In contrast, members of the territorially based non-Russian nations living in their traditional homelands argue in terms of group equality. As is also evident from other multiethnic societies, group equality tends to be defined in many ways, be it the need to "catch up" with other groups or the need to protect native cultures through special privileges.²³ The Russians constitute the third player in this game, and their arguments -- if openly expressed -- revolve around the special rights due to them as the state nation which has borne disproportionate

sacrifices for everybody else.

In multiethnic societies ethnic groups not only compete with each other, they also refer to competing principles and values when evaluating the equity of their standing. Survey research with former citizens of the USSR helps to gauge the socio-psychological reference points of various groups and to gain new insights about the political dynamics of problems such as ethnically differentiated access to socioeconomic and political status. Even if one must assume that there are some distortions in the picture provided here because of sample limitations, these interviews provide a basic outline of the situation. And it shows that various nationalities in the USSR -- including the Russians -- react negatively if they perceive unequal and unjust treatment of their groups. Politically this is my most important finding. As has been argued by the proponents of the theory of relative deprivation, what the actual standing of individual groups really is according to various statistical measures is less important politically than how it is perceived and interpreted by the groups themselves. People do not rebel against their condition when they are deprived in the absolute sense, but when they feel deprived.²⁴

NOTES

¹My earlier work is summarized in Rasma Karklins, Ethnic Relations in the USSR: The Perspective from Below (Boston: Allen and Unwin, 1986). For other studies based on emigrant surveys see Juozas A. Kazlas, "Social Distance Among Ethnic Groups" in Nationality Group Survival in Multi-Ethnic States, ed. Edward Allworth (New York: Praeger, 1977): 228-55; Thomas Kussmann and Bernd Schafer, Nationale Identitat: Selbstbild und Fremdbilder von deutschen Aussiedlern aus der Sowjetunion (Cologne: Berichte des Bundesinstituts fur ostwissenschaftliche und internationale Studien, 46, 1982); Zvi Gitelman, "Are Nations Merging in the USSR?" Problems of Communism, 33 (1983): 35-47.

²Crawford Young, "The Temple of Ethnicity," World Politics, 35 (1983): 652-662.

³For some recent statements on this see Grey Hodnett, Leadership in the Soviet National Republics (Oakville, Ont.: Mosaic Press, 1978): 38, 95, 392-393; Nancy Lubin, Labour and Nationality in Soviet Central Asia: An Uneasy Compromise (Princeton, N.J.: Princeton University Press, 1984), esp.: 83-89; Gail Warshofsky Lapidus, "Ethnonationalism and Political Stability: The Soviet Case", World Politics, 34 (1984): 569.

⁴In recent years, such references have usually been made in the context of calls for ending such "nativization". See G.I. Litvinova and B.Ts. Urlanis, "Demograficheskaiia politika Sovetskogo Soiuz," Sovetskoe gosudarstvo i pravo, 1982, no. 3: 45, and sources cited in Lapidus, "Ethnonationalism": 570. For an unusually open discussion of the role of ethnicity in access to higher education see L.V. Ostapenko, and A.A. Susokolov, "Dinamika natsional'nogo sostava studenchestva soiuznykh respublik v poslevoennye gody," Sovetskaia etnografiia, 1985, no. 2: 47.

⁵Of the one third of the random sample responding to this question, 5.2%

said "everybody was treated the same" in access to government and party positions, 8.5% in access to jobs, and 9.6% in access to higher education (N=924).

*One could also have coded the Russians in the RSFSR as "local republic nationality", but this would be more confusing than the scheme used in Figures 1 to 3; logically the "Russians are treated best" category means different things whether the reference is to the RSFSR or to the other republics.

*Where there were few respondents from a certain republic and the distribution of replies was similar, republics were recoded into regions, namely into Central Asia, Georgia and Armenia, and Lithuania and Estonia. Latvia and Azerbaidzhan appear separately in Figures 1 to 3 because the distributions of responses are unique.

*On the low representation of Belorussians in political positions, better jobs, and higher education, compare Hodnett, p. 104 and Ellen Jones and Fred W. Grupp, "Modernisation and Ethnic Equalisation in the USSR," Soviet Studies, 36 (1984): 163, 165, 171. In the case of Latvia, the statistics are more contradictory [Hodnett, passim, Jones and Grupp, passim, and Romuald J. Misiunas and Rein Taagepera, The Baltic States: Years of Dependence 1940-1980 (Berkeley, CA: University of California Press, 1983) p. 198], but samizdat protests support the view of Russian dominance. See the protest letter of seventeen Latvian communists smuggled to the West in 1972, in George Saunders, ed., Samizdat: Voices of the Soviet Opposition, (New York: Monad Press, 1974), especially pp. 430-435.

*The RSFSR is omitted here due to low variance (compare Figures 1 to 3). The responses are dichotomized in order to simplify analysis; alternative "cuts" in the data are substantively less interesting and are problematic numerically.

*Of those Russians who lived in the RSFSR (N=62), just 77% stated that Russians were treated better in regard to government, compared to 93% of the rest

of our respondents. The figures for access to jobs and higher education are similar.

¹¹For Western theories see Joseph Rothschild, Ethnopolitics: A Conceptual Framework (New York: Columbia University Press, 1981), passim, and Hubert Blalock, Jr., Toward a Theory of Minority Group Relations (New York: John Wiley and Sons, 1967), ch. 2. For Soviet findings see Iu. Arutiunian and Iu. Kakhk, Sotsiologicheskie ocherki o Sovetskoi Estonii (Tallin: Periodika, 1979), p. 100; L.M. Drobizheva, Dukhovnaia obshchnost' narodov SSSR: istoriko-sotsiologicheskii ocherk mezhnatsional'nykh otnoshenii (Moscow: Mysl', 1981), pp. 96-99, 201; and A.A. Susokolov, "Neposredstvennoe mezhetnicheskoe obshchenie i ustanovki na mezhlchnostnye kontakty", Sovetskaia etnografiia, 1973, no. 5: 73-78.

¹²The survey recorded three emigration motives; I summarize responses into a dichotomous variable whether discrimination was mentioned or not.

¹³In calculating the relative effect of the variables I follow the logic and technique outlined in Morris Rosenberg, The Logic of Survey Analysis (New York: Basic Books, 1968), chapter 7.

¹⁴There were three questions about the R's own ethnic identity, two of which focused on self-identification: "...what did you consider to be your nationality" ... and "...did you feel you belonged to another nationality besides..."; a third asked about official identification in the internal passport. Most respondents with a mixed ethnic identity self-identified with two nationalities, one of which was inscribed in the passport. The large majority of the "Mixed Jews" self-identified their nationality as both Jewish and Russian, with slightly more than half having "Jew" inscribed in the passport, and the others "Russian".

¹⁵Affiliates of mixed Jewish respondents are considered to be of the same nationality if they are Jewish, since respondents rarely indicated a mixed ethnic identification for spouses or friends. If respondents were not married during LNP (22%), the second close friend was taken as a substitute in the score (157

cases, 17%); if there was no second friend only the first friend was counted (18 cases, 2%). If there was a spouse, but no friends, only the spouse was counted (78 cases, 8%). If there was neither a spouse or friend, the respondents were defined as missing cases (N=27).

¹⁴Of the subsample only 17 people (1.8%) had spouses that were neither Russian or Jewish, and 74 (8%) had such as the closest friend.

¹⁵This summary score is used in crosstabulations only; the more detailed score ranging from 0 to 21 is used in regression.

¹⁶Iu. V. Arutiunian, L.M. Drobizheva, and V.S. Zelenchuk Opyt etnosotsiologicheskogo issledovaniia obraza zhizni (Moscow: Nauka, 1980) p. 202.

¹⁷In the regression, a dichotomous version of the "nationality of respondent" variable is used, differentiating between "Jews and mixed Jews" and "Russian or Other". Using regression with dichotomous dependent variables is problematic because of violation of the assumptions of regression and because only a small percentage of the variance can be explained. Here, the regression results are examined nevertheless to see if they lend support to the trends seen in the crosstabulations and to get an indication of the relative ranking of multiple independent variables.

¹⁸Compare note 11.

¹⁹For the use of this technique see footnote 19. For regression, an adjustment was made in the job satisfaction variable. Since the "not applicable" category logically should be excluded from the variable, but this would lead to many missing cases (22%), part of the latter were recoded by substituting the respective codes of the "satisfaction with higher education" variable. Although problematic, this substitution can be legitimized in that it affects mostly individuals whose "job" it was to study, and by noting that the general pattern of responses to the two questions is similar.

²⁰Next to previously cited sources giving the same conclusion see also Mark

Popovsky, Manipulated Science (New York: Doubleday, 1979), pp. 130-133. Soviet ethnosociological studies have found unusually high rates of negative ethnic attitudes among eighteen to twenty-four year olds in various parts of the USSR and related this to competition for access to higher education. Drobizheva, Dukhovnaia obshchnost', p. 116; and Russian samizdat of the right has emphasized that Russian nationalism is promoted by the preferential treatment afforded to ethnic minorities. Compare sources cited by Victor Zaslavsky, "The Ethnic Question in the USSR," Telos, 4 (1980), p. 73.

²³For an excellent analysis of the tension between individual and group rights see Vernon Van Dyke, "The Individual, the State, and Ethnic Communities in Political Theory," World Politics 29, (1977): 343-69; for a synopsis of the American tradition to emphasize the individualistic view of equality see Sidney Verba and Gary R. Orren, Equality in America: The View from the Top (Cambridge: Harvard University Press, 1985) chapters 1 and 2.

²⁴For a good summary and new test of the theory see Serge Guimond and Lise Dube-Simard, "Relative Deprivation Theory and the Quebec Nationalist Movement: The Cognition-Emotion Distinction and the Personal-Group Deprivation Issue," Journal of Personality and Social Psychology, 44, (1983): 526-535.

REFERENCES

- Arutiunian, Iurii V. 1969. "Konkretno-sotsiologicheskoe issledovanie natsional'nykh otnoshenii." Voprosy filosofii, No. 12: 129-139.
- _____, L.M. Drobizheva, and V.S. Zelenchuk. 1980. Opyt etnosotsiologicheskogo issledovaniia obraza zhizni. Moscow: Nauka.
- Azrael, Jeremy R., ed. 1978. Soviet Nationality Policies and Practices. New York: Praeger Publishers.
- Blalock, Hubert, Jr. 1967. Toward a Theory of Minority Group Relations. New York: John Wiley and Sons.
- Connor, Walker. 1984. The National Question in Marxist-Leninist Theory and Strategy. Princeton, N.J.: Princeton University Press.
- Drobizheva, L.M. 1981. Dukhovnaia obshchnost' narodov SSSR: istoriko-sotsiologicheskii ocherk mezhnatsional'nykh otnoshenii. Moscow: Mysl'.
- Ozyuba, Ivan. 1968. Internationalism or Russification? A Study in the Soviet Nationalities Problem. London: Weidenfeld and Nicolson.
- Gitelman, Zvi. 1983. "Are Nations Merging in the USSR?" Problems of Communism, 32 (September-October, 1983): 35-47.
- Glazer, Nathan, and Daniel P. Moynihan, eds. 1975. Ethnicity: Theory and Experience. Cambridge, Mass.: Harvard University Press.
- Hargrove, Erwin C. 1970. "Nationality, Values, and Change: Young Elites in French Canada." Comparative Politics, 2: 473-499.
- Hechter, Michael. 1975. Internal Colonialism. Berkeley, Calif.: University of California Press.
- Hodnett, Grey. 1978. Leadership in the Soviet National Republics. Oakville, Ont.: Mosaic Press.
- Inkeles, Alex, and Raymond A. Bauer. 1959. The Soviet Citizen, Daily Life in a

- Totalitarian Society. Cambridge, Mass.: Harvard University Press.
- Jones, Ellen, and Fred. W. Grupp. 1984. "Modernisation and Ethnic Equalisation in the USSR." Soviet Studies, 36: 159-184.
- Karklins, Rasma. 1984. "Ethnic Politics and Access to Higher Education: The Soviet Case." Comparative Politics, 16: 277-294.
- _____. 1986. Ethnic Relations in the USSR: The Perspective from Below. Boston: Allen & Unwin.
- Kazlas, Juozas A. 1977. "Social Distance Among Ethnic Groups," in Edward Allworth (ed.), Nationality Group Survival in Multi-Ethnic States, New York: Praeger: 228-55.
- Kussmann, Thomas, and Bernd Schafer. 1982. Nationale Identitat: Selbstbild und Fremdbilder von deutschen Aussiedlern aus der Sowjetunion. Cologne: Berichte des Bundesinstituts fur ostwissenschaftliche und internationale Studien, 46.
- Lubin, Nancy. 1981. "Assimilation and Retention of Ethnic Identity in Uzbekistan." Asian Affairs, 12: 277-285.
- _____. 1984. Labour and Nationality in Soviet Central Asia: An Uneasy Compromise. Princeton, N.J.: Princeton University Press.
- Ostapenko L.V. and A.A. Susokolov. 1983. "Etnosotsial'nye osobennosti vosproizvodstva intelligentsii," Sotsiologicheskie issledovaniia, no. 1: 10.
- Popovsky, Mark. 1979. Manipulated Science. New York: Doubleday.
- Rakowska-Harmstone, Teresa. 1977. "Ethnicity in the Soviet Union," The Annals of the American Academy of Political Social Science, 433: 73-87.
- Rosenberg, Morris. 1967. The Logic of Survey Analysis. New York: Basic Books.
- Rothschild, Joseph. 1981. Ethnopolitics, A Conceptual Framework. New York: Columbia University Press.
- Shibutani, Tamotsu, and Kian M. Kwan. 1965. Ethnic Stratification: A Comparative Approach. New York: Macmillan.

Solchanyk, Roman. 1982. "Russian Language and Soviet Politics." Soviet Studies, 34: 23-42.

Susokolov, A.A. 1973. "Neposredstvennoe mezhetnicheskoe obshchenie i ustanovki na mezhlichnostnye kontakty", Sovetskaia etnografiia, No. 5: 73-78.

_____. 1976. "Vliianie razlichii v urovne obrazovaniia i chislennosti kontaktiruiushchikh etnicheskikh grupp na mezhetnicheskie otnosheniia (po materialam perepisei naseleniia SSSR 1959 i 1970 gg)." Sovetskaia etnografiia: No. 1: 101-111.

Young, Crawford. 1983. "The Temple of Ethnicity", World Politics, 35: 652-662.

Zaslavsky, Victor. 1980. "The Ethnic Question in the USSR." Telos, 4: 45-72.

_____. 1982. The Neo-Stalinist State: Class, Ethnicity and Consensus in Soviet Society. Armonk, N.Y.: Sharpe.

_____, and Robert J. Brym. 1983. Soviet-Jewish Emigration and Soviet Nationality Policy. New York: St. Martin's Press.

Figure 1. Nationality Treated Best in Access to Political Positions



Figure 2. Nationality Treated Best in Access to Jobs

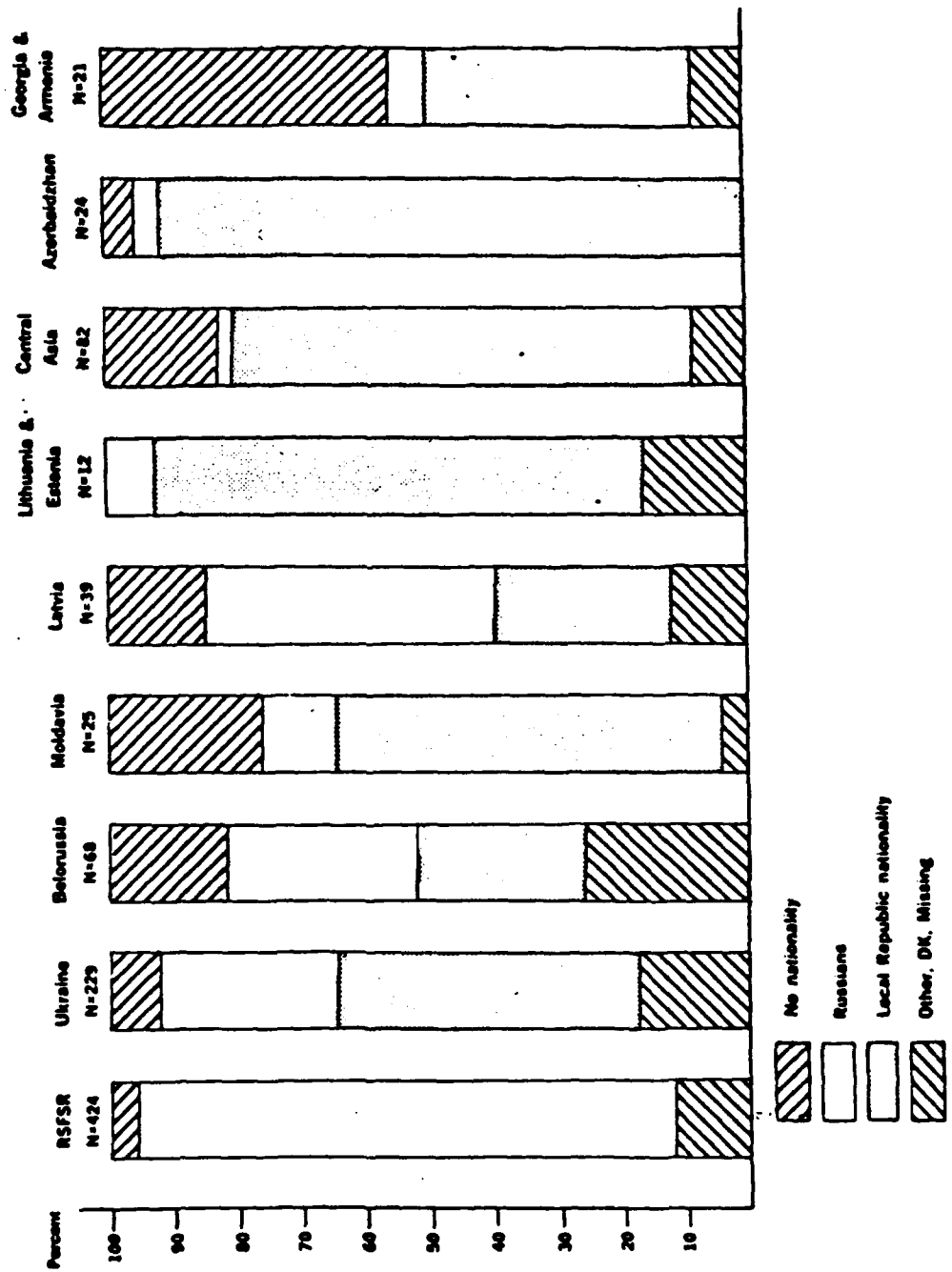


Figure 3. Nationality Treated Best in Access to Higher Education

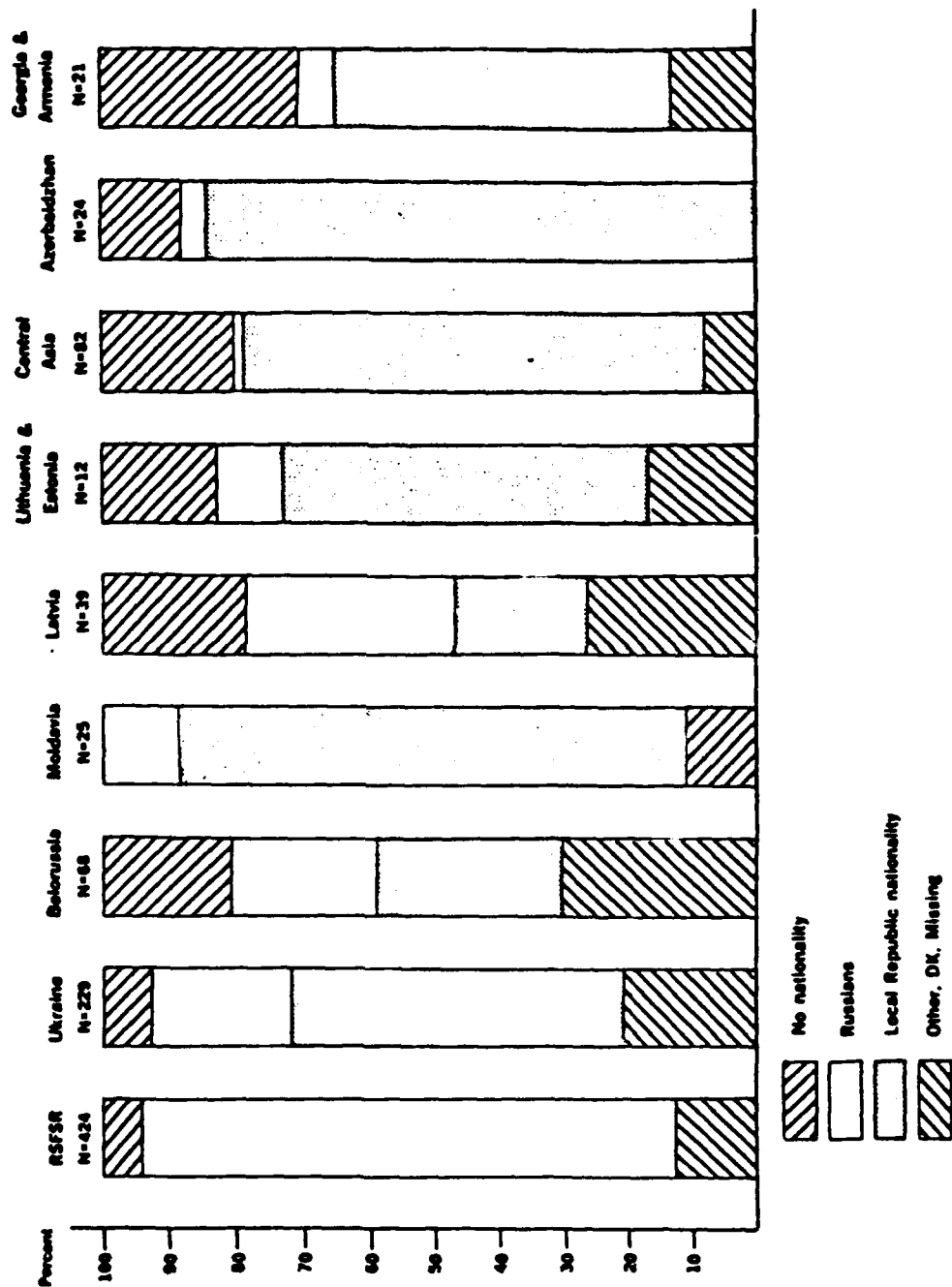


Table 1. Relative Importance of Characteristics of CPSU Recruits

Perceived Importance	Characteristic ^a				
	Nationality	Class	Leadership, ^b Influence, or Hard Work	Education or Experience	Sex
Very important	59%	43%	23%	15%	5%
Somewhat important	32%	33%	35%	29%	22%
Not important	7%	18%	38%	53%	68%
Don't Know, or Missing	2%	6%	4%	3%	5%

^aAll respondents saying that "some people are more likely to be recruited than others" (N=730) were asked to evaluate each characteristic.

^bResults for three separate questions are summarized due to similarity.

Table 2. Perception of Titular Nationality Being Treated Best in Non-Russian Republics,
By Various Factors (%)

	Percent Seeing Titular Nationality as Being Treated Best in				
Factor	a) access to government or party positions	b) getting jobs	c) access to higher education	N ^a	
A. Nationality					
Jewish Only	59	54	56	(386)	
Mixed Jewish	53	51	53	(49)	
Russian	65	50	47	(20)	
Other	42	31	35	(26)	
B. Level of education					
Secondary or less	55	48*	52*	(322)	
Some higher or more	64	61	59	(159)	
C. Interest in politics					
Hardly interested	54	48	48	(211)	
Interested	61	55	59	(270)	
D. Job satisfaction					
Satisfied	56*	51	55*	(333)	
Not satisfied	68	60	60	(95)	
Not applicable	51	43	43	(53)	

^aIndicates total number of respondents on which percentage is based. The N listed refers to responses to question a); the Ns are very similar for b) and c).

*Significant at 0.05 or less

Figure 4. Quality of Ethnic Relations between Non-Jewish Nationalities

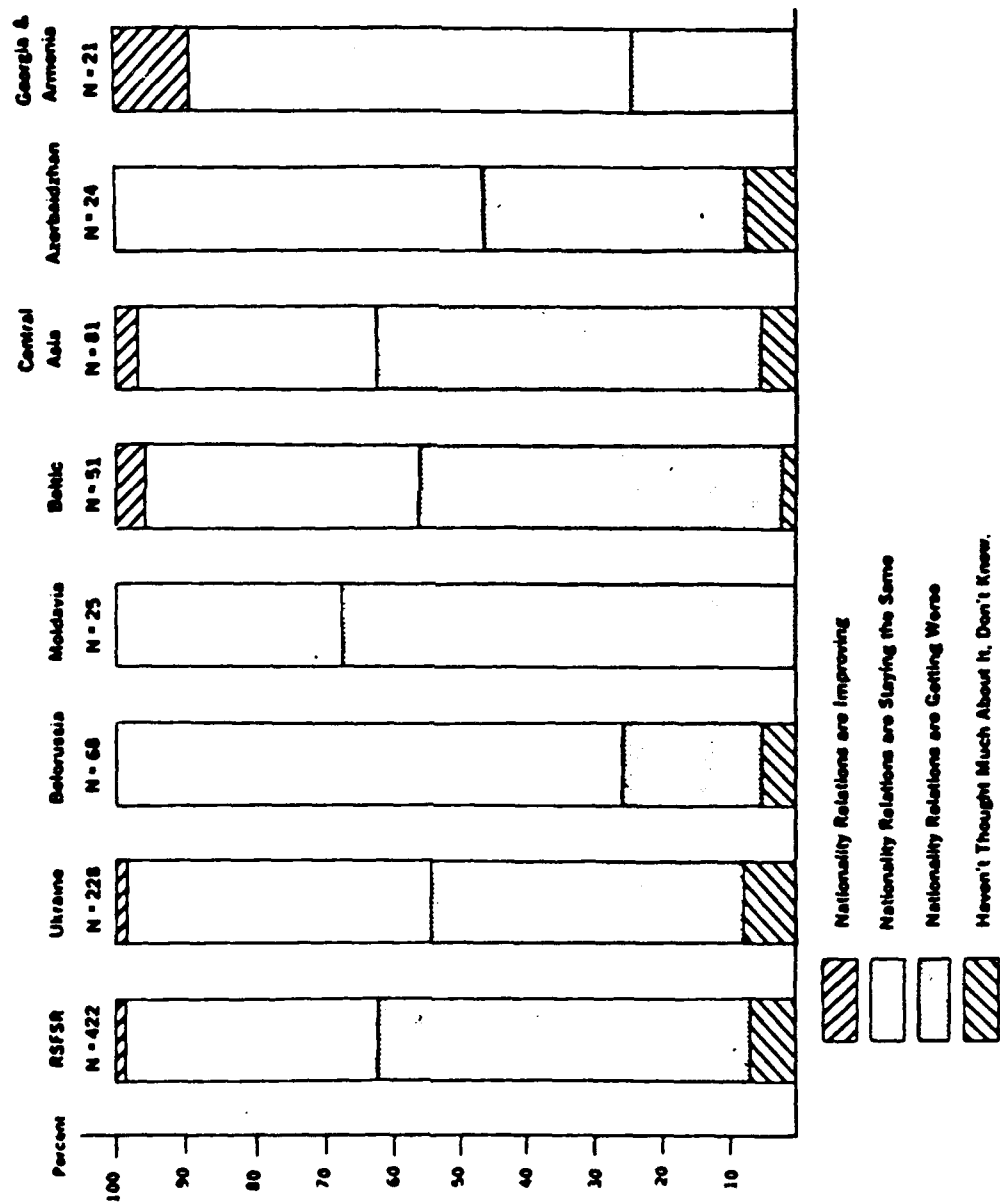


Table 3. Comparison of the Influence of Demographic Variables on Evaluation of Group Ethnic Relations and Personal Discrimination (%)

	Percent Citing Discrimination	Percent Seeing Worsening of Ethnic Relations	N ^b
Some higher education or more			
46 years old or younger ^a			
Male	46	57	(167)
Female	37	55	(160)
Over 46 years old			
Male	45	52	(31)
Female	37	54	(59)
Secondary education and less			
46 years old or younger			
Male	40	43	(129)
Female	44	47	(152)
Over 46 years old			
Male	49	56	(80)
Female	40	36	(146)

^aThe cutting point is between people born before and after 1931, with 1977 the median reference year for age during the "last normal period" in the USSR.

^bIndicates total number of respondents on which percentage is based.

Table 4. Ethnic Assessments By Ethnic Affiliation Score and By Nationality

Nationality and ethnic affiliation	Percent Citing Discrimination	Percent Seeing Worsening of Ethnic Relations	N ^b
Jewish only			
EF score ^a			
0	27	38	(45)
1	42	46	(229)
2	53	54	(394)
Mixed Jewish			
EFscore			
0	0	43	(7)
1	41	52	(42)
2	39	50	(54)
Russian and Other			
EFscore			
0	28	34	(32)
1	21	46	(56)
2	5	50	(36)

^aIndicates whether zero, one, or two respondent's closest affiliates (spouse and best friend) are of his nationality.

^bIndicates total N on which percentage is based.

Table 5. Ethnic Assessments by Ethnic Attitude Score and Nationality

Nationality and Ethnic Attitudes	Percent Citing Discrimination	Percent Seeing Worsening of Ethnic Relations	N ^b
Jewish Only			
EAscore ^a			
0	37	40	(126)
1	50	50	(300)
2	49	56	(263)
Mixed Jewish			
EAscore			
0	19	50	(26)
1	42	52	(52)
2	41	48	(27)
Russian and Other			
EAscore			
0	18	44	(63)
1	14	44	(52)
2	33	33	(15)

^aA zero indicates that there were no personal ethnic preferences, whereas one and two indicate a rising intensity of such preferences.

^bIndicates total N on which percentage is based.

Table 6. Ethnic Assessments by Political Interest and Political Outlook

	Percent Citing Discrimination	Percent Seeing Worsening of Ethnic Relations	Total N
Interested in politics			
Political motive for emigration			
Yes	44	59	(298)
No	48	51	(294)
Not interested in politics			
Political motive for emigration			
Yes	28	45	(76)
No	37	37	(252)

Table 7. Ethnic Assessments by Interest in Politics and Job Satisfaction

	Percent Citing Discrimination	Percent Seeing Worsening of Ethnic Relations	Total N
Interested in politics			
Satisfied with job			
No	54	64	(130)
Yes	45	54	(355)
Didn't work	41	50	(105)
Not interested in politics			
Satisfied with job			
No	52	39	(33)
Yes	31	42	(206)
Didn't work	36	32	(89)

Table 8. Perception of Non-Russian Republic Nationality Being Treated Best,
Related to Evaluation of Quality of Nationality Group Relations (%)

Percent Seeing Titular Republic Nationality As Being Treated Best in				
Other Question	a) access to political positions	b) getting jobs	c) access to higher education	Total N
Relations among non-Jewish nationalities perceived as				
Staying the same	51	42	48	(261)
Worsening	66	64	62	(220)
a Chi-square 9,179 df 1 significance 0.002				
b Chi-square 22,232 df 1 significance 0.000				
c Chi-square 9,300 df 1 significance 0.002				

Chapter Eleven

Mobilized Participation and the Nature of the Soviet Dictatorship

William Zimmerman

ACKNOWLEDGEMENT

I wish to thank Robert Axelrod, Michael Berbaum, Sandra Gubin, John Kingdon, and Deborah Yarsike for their invaluable assistance and/or advice.

William Zimmerman

How shall we characterize contemporary regime-society relations in the Soviet Union? In the 1950s Soviet specialists and students of comparative politics more broadly were agreed on the basic outlines of How the Soviet System Works, to use the title of the summary volume of the Harvard Project on the Soviet Social System (Raymond A. Bauer, Alex Inkeles, Clyde Kluckohn, 1959). The Soviet Union was a novel dictatorial form in which the regime insisted on, and accomplished, the mobilization to its purposes of the entire society. This pattern of regime-society relations differentiated the Soviet totalitarian system and the traditional autocracy, which discouraged mobilization of elites and masses and is content with citizen acquiescence.

Changes in the Soviet Union, developments in the social sciences, and improvements in the international climate all served to bring the totalitarian model under severe scrutiny in the 1960s. With the assimilation of the implications of the end of terror as an instrument of political control, there was a newfound sensitivity to the increased social differentiation and articulation of a growingly complex industrial society, along with renewed attention to the persistent impact of traditional Russian culture on the Soviet polity. If the Soviet system under Stalin has been described in Marxian terms as the revenge of the superstructure, the period from the 1960s forward might be described as the rediscovery of the base. Throughout the latter period, however, specialists and generalists alike (cf. Robert Dahl, 1971) have continued to describe the Soviet Union in terms that stress, inter alia, the extent to which it is a highly participatory, mobilized, political system. As such, its distinctive attribute is that political participation by the Soviet citizens is not spontaneous but "initiated

by the political leaders and supervised by the CPSU" (Frederick Barghoorn, 1972, p. 14). Very much at issue though is whether and to what extent there have been changes over time in the ability of the regime to harness Soviet citizens to its purposes.

Such is the purpose of this paper. In particular, I am concerned with two tasks. The first task is to examine several domains of the contemporary Soviet citizen's daily life, control over which we associate with an effective mobilization system. This I do to ascertain which Soviet citizens engage in what kinds of politically relevant behavior, excluding efforts by citizens to influence the political process (W. Di Franceisco and Z. Gitelman, ~~American Political Science Review~~, September 1984, 603-621). Who participates actively in mobilized groups or in the mobilization and agitation that attends elections? Which groups does the regime reach through its control over the media? Are those Soviet citizens most politicized, in the sense of being relatively more interested in politics, also those most highly mobilized, in the sense of being most prone to engage in politically affirmative or conformist behavior? I hope in this way to provide an empirical basis for characterizing the contemporary Soviet dictatorship.

Traditional authoritarian dictatorships assume passivity and quiescence are the norm among all citizens, elites and non-elites alike. A mobilization system, by contrast, is one where at the limit there is high and uniform mobilization across the citizenry, elites, and non-elites alike. Variants on the notion of the mobilization system are possible as well. Thus it might be more descriptive to think of the Soviet dictatorship as an elite mobilization system where elites of all stripes are politically mobilized by the regime and engage in

politically affirmative behavior while non-elites are substantially less participatory. Likewise only political elites -- governmental and party workers -- might be mobilized by the political system. Both non-political elite and non-elite behavior would be explained by social and demographic variables or by cognitive or affective dispositions to politics -- social mobilization in Karl Deutsch's sense (Deutsch in Jacobson and Zimmerman, 1969, p. 84) -- rather than by regime-induced political mobilization. Such a dictatorship would differ from a traditional authoritarian regime (where passivity and quiescence are the norm), but evidence for regime dominated mobilized participation throughout the society would be modest.

The second task is longitudinal rather than cross sectional. Have there been important changes over time in the regime's ability to mobilize the citizenry to its purposes? Is there evidence of significant changes over time in the efforts by citizens to work the system and to avoid mobilization? Addressing this task provides an empirical basis for assessing the evolution over time in the nature of the Soviet dictatorship.

The data for this paper are derived from the Soviet Interview Project, which administered a massive general questionnaire in 1983 to 2793 former Soviet citizens, most of whom had emigrated to the United States in 1979 or 1980. (Some of the questions were asked of only one third of those interviewed.) These people are overwhelmingly Jewish, disproportionately urban and substantially more educated than the general Soviet population. There are also other known and unknown biases: no claim is being made that the survey (for technical details,

see Barbara Anderson, Brian Silver, and Robert Lewis, 1984) has yielded a representative sample of the Soviet citizenry or even the Soviet urban population.

Nevertheless, by using the interviewees as informants about behavior I feel comfortable in making some claims about Soviet society. With respect to some, but not all politically relevant behaviors, the behavior of those individuals who subsequently migrated is not likely to have been substantially different from those who did not. Differences across groups in the sample of emigrants, moreover, are often likely to find counterparts in the Soviet Union. (See methodological statement in Chapter one
 ^ above pp. ———)

The Contemporary Soviet Citizen and Mobilization.

In order to assess in the survey the contemporary Soviet dictatorship and, specifically, the interaction between regime and citizen in the Soviet Union, it was necessary both to develop a parsimonious scheme for placing Soviet citizens in the social system and to examine responses among various groupings of citizens to a series of questions pertaining to reported behavior relevant to political mobilization in the Soviet Union.

The scheme employed to categorize the Soviet citizen distinguished five categories: political leaders, managers, high level professionals, low level professionals and clerical workers, and others (who in this highly urban sample were largely blue collar workers). Basic occupation was coded according to the official Soviet system of occupations used in the 1970 census as set out in Sistematicheskii slovar' zaniatii (1969). By political leaders I refer to all those persons in the sample whose response to the question "What was your

specialty" in the last job occupied during the last normal-period in the USSR was subsumed in the Sistematicheskii slovar' zaniatii under the rubrics "leaders of state administration and their structural subdivisions"; "leaders and instructors of party, Komsomol, trade union, cooperative and other social organizations and their structural subdivisions," and "leaders of enterprises."

I defined as managers those persons who termed themselves engineers^{and} who by the criteria of the Systematic Dictionary are categorized as "main specialists," "engineers," or "designers" (categories 16, 17, 18 respectively, of the Systematic Dictionary), medical doctors with MDs, leaders of higher educational institutions, "workers in literature and the press," artists and composers, "communications workers," "chiefs of plan, financial, accounting, stations," "managers of cadre sectors, general sectors and offices," directors and chiefs of stores and sections of stores and major eating establishments, or sectors of "supply and markets," "commercial enterprise or everyday services." To be so coded, however, it was also necessary that, along with the respondent's job title, the dolzhnost' -- the level of the post actually held -- clearly identify each as performing substantial administrative tasks. Thus, engineers were coded as administrators only if they had a dolzhnost' identifying them as head or leading engineers. Doctors and dentists were included only if they were hospital heads or heads of medical divisions or laboratories. Professors were coded as managers if they were heads of faculty or deans; writers, editors, and the like if they were directors or deputy directors of film studios, newspapers, etc.; communications workers, workers in trade, restaurants, financial or accounting "stations" only

if they were directors or deputy directors, etc. Other engineers, doctors (with MDs), university faculty, writers, journalists and artists, librarians, lawyers, commodities experts (tovarovery) and economists were treated as high level specialists.

In like fashion, persons who were technicians, inspectors, bookkeepers, cashiers, communications and postal workers, stenographers and typists, were treated as low level professionals and/or clerical workers. All the remainder were included in the "others" category. These people were largely but not exclusively blue collar workers. (It will be remembered that there are almost no collective farmers or other rural occupations among these respondents.)

This way of partitioning the data has considerable face validity. With respect to education, for instance, it is noteworthy that of 137 people in the sample with six or fewer years of primary schooling only four were coded as political leaders, managers, or high level professionals. Seven from the same group were coded as low level professionals and the remaining 126 were coded as "others, primarily blue collar." Similarly, post-secondary education and occupational status are congruent. Privilege as measured by access to an official car and occupational grouping seem to mesh also (Table 1).

The method employed was to examine the responses across the five groupings to a series of reported behaviors relevant to the pattern of political mobilization in the Soviet Union. These behaviors represent five categories: 1) those that are election related; 2) those that involve regime-dominated group behavior; 3) those related to regime controlled media; 4) those involving access to non-regime media; and 5)

Table 1
Respondents' Access to Official Car

Did you or a member of your family have access to an official car?		Occupational Grouping					Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others	
Yes	% = N =	26.8 30	17.3 23	7.5 63	5.6 44	3.2 26	6.9 186
Total	% = N =	112	133	843	786	823	100.0 2697

those that are testimony to effective mobilization for national security and military preparedness.

Everyone is familiar with the "Ivory Snow" aspects of Soviet voting patterns in which all vote and 99.44% of the votes are for the regime candidates. We have known for some time that it is possible to avoid voting in the Soviet Union. Both our notions of regime induced political mobilization and Deutsch's conception of social mobilization suggest that, if the propensity to vote is not uniform across groups, it should be higher among elites (groups 1, 2, 3 in all tables referring to occupational grouping) than among non-elites (groups 4 and 5) and higher among political (group 1) or politico-administrative elites (1 and 2) than among other high status persons (group 3).

The Soviet Interview Project data do not preclude the possibility that Soviet reality meshes with a mobilization system model. The reported voting behavior of those in the sample who played no significant role in the decision to emigrate, is compatible with such a model (Table 2). From this subset of the sample, nothing can be said with confidence about the political leaders or the managers, and the high level professionals do not appear to differ from the non-elites in their voting behavior. Nevertheless, if we make the modest assumption that some proportion of the Soviet citizens who did not migrate act in their voting behavior in ways parallel to those who emigrated, then Theodore Friedgut is correct when he asserts that it is "exactly the people who should by all criteria, Soviet and non-Soviet alike, be the most active participants in elections" who are relatively prone not to vote (Friedgut, p. 118). Viewing the sample as a whole or looking

separately at those who either made the decision to emigrate or shared in the decision, persons in the emigrant sample whose status in the Soviet Union was that of political leader or high level professional were those most disposed not to engage in system affirmation through participation in voting (Table 2).

When we turn to participation in elections to soviets, whether as member of an electoral commission, as a canvasser/agitator or, much less frequently, as a judge or candidate, hypotheses informed by assumptions related to regime-induced political mobilization or more spontaneous social mobilization fare much better. Table 3 reports the responses given by those surveyed to the question "Did you ever work in an election to a Soviet?" The "others" in our tables (who are almost all blue collar workers) differ from everyone else (groups 1 through 4). All elites (groups 1, 2, and 3) taken together contrast significantly with others in the sample. Political elites and high-level professionals may not vote as often as others in the USSR. But while political leaders do not contrast significantly with other groups, political leaders and high-level professionals are disproportionately more prone to engage in regime-affirming behavior by working in elections to Soviets. I suspect that this is so in the Soviet Union as well. It is a relatively easy way to pay dues.

Dues are also paid at the work place, and some 8% of the total sample interviewed stated that they belonged to work committees. There the difference between political and administrative groups and between political leaders on the one hand and managers and high-level professionals taken together on the other is not significant. What is striking is the contrast between elites (groups 1, 2, and 3) and non-

Table 2
Voting Behavior by Role in Decision to Emigrate:
Those Who "Sometimes" or "Never" Voted in %

Role in Decision to Emigrate		Occupational Grouping				
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others
played no substantial role 100% = 199 ¹	% =	50.0	33.3	21.5	23.9	21.2
	N =	3	3	14	16	11
Participated in decision to emigrate 100% = 1606 ²	% =	38.5	28.0	39.5	20.2	19.3
	N =	25	23	191	100	93
Made decision to emigrate 100% = 887 ³	% =	60.0	28.9	51.0	29.5	32.4
	N =	24	11	152	66	90

1. Chi-square = 8.49; sig. = .39

2. Chi-square = 69.46; sig. = .00

3. Chi-square = 44.53; sig. = .00

Table 3
Participation in Election to Soviets
by Occupational Grouping

Did R ever work in election?		Occupational Grouping					Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others	
Yes	% = N =	23.2 26	15.0 20	26.5 224	16.7 132	6.7 56	16.9% 458
Total	N = % =	112	133	846	790	830	2711 100.0

Chi-square = 119.74
Significance = 0.00

elites (4 and 5): political leaders, managers, and high-level professionals are disproportionately represented among the participators, and the low-level professionals and especially "others" (largely workers) are underrepresented (Table 4).

Looking at participation in organs such as the People's Militia, People's Control, or Comrade's Courts, however, we do not obtain results indicating that the overall political system should be thought of as a mobilization, or as an elite mobilization, system. Mobilization seems modest among the emigrants: only a bit more than one-tenth of those surveyed answered that they went regularly to such meetings -- which hardly evokes a mobilization system. When we ask the question, "How often did you go to the meetings?" we discern an essentially homogenous distribution across the five groups -- which is incompatible with the conception of elite mobilization. (The distribution across groups is itself compatible with a mobilization model, but the magnitude is not [Table 5].)

Another important domain which we conventionally associate with the process of political mobilization in modern authoritarian systems is the media. Total control over the means of communications was one of the six elements in the Friedrich and Brzezinski totalitarian syndrome. Newspaper readership in the sample is very high with political leaders being distinguished as readers from the remaining four groups, and with all elites distinguishable from non-elites (Table 6). These differences are more crisply defined in the emigrant sample when one focuses upon what it is groups read. Political leaders pay more attention to the news than do others, and the three elite groups taken together are relatively more news attentive than the remaining two groups.

Table 4

Work Committee Participation
by Occupational Grouping

Did R belong to committees at work?		Occupational Grouping					Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others	
Yes	% = N =	16.1 18	15.8 21	11.0 93	7.6 60	4.8 40	8.6% 232
Total	% = N =	112	133	842	788	829	100.0 2704

Chi-square = 39.19
significance = 0.00

Model	Estimate	Z	df	L.O.F. G^2
Null Model			4	38.20***
Constant	-1.18302	-34.46***	1	
Contrast Model			2	4.00
Constant	-1.14146	-32.69***	1	
(1,2,3) vs. (4,5)	.45601	5.41***	1	
(4') vs. (5')	.12148	2.30*	1	
Reduction in lack of fit due to contrasts			2	34.20***

* p < .05

** p < .01

*** p < .001

Table 5

Attendance at Meetings of People's Militia,
People's Control, or Comrade's Courts

How often did you attend?		Occupational Grouping					Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others	
Regularly	% = N =	34.8 8	47.1 8	37.6 59	34.6 18	38.4 28	37.6% 121
Total	% = N =	23	17	157	52	73	100.0 322

Chi-square = 0.94
Significance = 0.92

A similar pattern is observed when we focus on the preferences of television watchers and radio listeners as well, but content preferences by media type are what matter. A hierarchy is evident regarding what Soviet citizens seek in the three media sources: news is sought primarily from newspapers, secondarily from the radio and residually from television (see Table 6). The largely undifferentiated and, what must be by international standards, relatively high attention by all sectors of Soviet society to news in the papers suggests a rather mobilized population; the preoccupation with variety and music shows on television may be indicative of a future, as television comes to be the preeminent medium, which is more apolitical and less mobilized (Table 7).

In the pure case, of course, the Soviet regime's monopoly over the media would be complete. It is not. Non-Soviet, communist, media sources, samizdat, and Western sources are available for the diligent and concerned. The regime, with varying degrees of intensity at various junctures, has sought to thwart Soviet citizen efforts to listen to foreign radio and has attempted to deter the reading of samizdat. Of the emigrants interviewed who had read samizdat roughly five-sixths answered that it was risky, and roughly two-fifths of them reported they thought it was "very" risky. How risky the reading of samizdat actually is may, of course, be questioned: these responses came from people who had read samizdat, and only one person in the sample reported having been punished for owning samizdat.

Statements about trends in the Soviet Union pertaining to the consumption of samizdat need to be made with great care. The proclivity to read samizdat was much greater among those who made the decision to

Table 6
Newspaper Readership in the Soviet Union

Did R read Soviet newspaper?		Occupational Grouping					Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others	
Yes	% = N =	95.9 47	91.1 41	86.5 237	87.7 228	81.8 216	86.2% 769
Total	% = N =	49	45	274	260	264	100.0 892

Chi-square = 9.58
Significance = 0.05

Table 7
Media Content Preferences in Newspapers,
Radio and Television

I. NEWSPAPERS						
Which does R prefer when read- ing newspapers?		Occupational Grouping				
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others
Variety	% = N =	31.9 15	46.3 19	40.1 93	48.0 109	51.7 109
News	% = N =	68.1 32	53.7 22	59.9 139	52.0 118	48.3 102
	% = N =	47	41	232	227	211
						100.0 758

Chi-square = 10.06
Significance = 0.04

Table 7 (continued)

II. RADIO						
Which does R prefer when listen- ing to radio?		Occupational Grouping				Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	
Variety	% = N =	46.2 18	59.5 22	59.7 126	71.2 158	65.9% 473
News	% = N =	53.8 21	40.5 15	40.3 85	28.8 64	34.1% 245
	% = N =	39	37	211	222	100.0 718

Chi-square = 16.48
Significance = 0.00

Table 7 (continued)

III. TELEVISION						
Which does R prefer to watch?		Occupational Grouping				
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others
Variety	% = N =	73.9 34	88.4 38	86.1 216	90.8 227	89.5 221
News	% = N =	26.1 12	11.6 5	13.9 35	9.2 23	10.5 26
Total	% = N =	46	43	251	250	247
						100.0 837

Chi-square = 11.85
Significance = 0.02

emigrate than among those who merely shared in, or were only slightly involved in, the decision. That notwithstanding, the survey data support the common sense view that, as in the case of vote avoidance, the largely blue collar, "others," are proportionately the least disposed to read samizdat (Table 8).

The same point, with the same caution, pertains to audiences for foreign radio. Overall, those who played no significant role in the decision to migrate were considerably less prone to listen to foreign radio than were those who shared in the decision or made the decision themselves. At the same time, high-level professionals, managers, and political leaders were considerably more inclined to listen than were the non-elite groupings. At least in the emigrant sample, moreover, if political position translates into being politicized, it is precisely they who are most disposed to listen to foreign radio. We detect this in the marginally more frequent "yes" answers by erstwhile political leaders to the question "Did you listen to foreign radio?" (Table 9).

Politicization and attention to non-Soviet media are also related, if politicization is defined as "interest in politics." Dichotomizing the sample into those who are "very interested" or "somewhat interested" in politics and those who were "slightly" interested or professed no interest at all produces a striking result. Persons with high interest in politics from all five groups are more prone to listen to foreign radio than respondents from any of the five groups who have little interest (Table 10). Expectations drawn from a regime-induced mobilization perspective would lead us to predict that all the Soviet citizen would be equally disinclined to gain access to non-regime media sources. An elite mobilization model would suggest

Table 8

Overall Samizdat Readership

Did R read <u>Samizdat</u> ?		Occupational Grouping					Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others	
Yes	% = N =	40.8 20	26.7 12	44.7 123	28.5 74	14.4 38	29.9 267
Total	% = N =	49	45	275	260	264	100.0 893

Chi-square = 62.40

Significance = 0.00

Model	Estimate	Z	df	L.O.F. G^2
Null Model			4	64.71***
Constant	-.42605	-11.66**	1	
Contrast Model			2	.32
Constant	-.41237	-10.81***	1	
(1,2,3) vs. (4,5)	.47910	6.15***	1	
(1,3) vs. (2,4)	.17477	4.13***	1	

Reduction in lack of fit due to contrasts 1 64.39***

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 9
Foreign Radio Listenership

Did R listen to foreign radio?		Occupational Grouping					Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others	
Yes	% = N =	96.4 108	93.2 124	91.0 770	80.4 635	76.8 636	83.9% 2273
Total	N = % =	112	133	846	790	828	2709 100.0

Chi-square = 91.38
Significance = 0.00

Model	Estimate	Z	df	L.O.F.	G ²
Null Model			4	99.95***	
Constant	.82561	31.58***	1		
Contrast Model			2	3.82	
Constant	1.05984	18.58***	1		
(1,2,3) vs. (4,5)	.82145	7.00***	1		
(1) vs. (2,3)	.31426	1.81 ⁺	1		
Reduction in lack of fit due to contrasts			2	96.13***	

* p < .05
** p < .01
*** p < .001

that, while the demographic variables that underly overall media attentiveness ought to drive attention to non-official sources as well, the politically active, and especially those whose occupational grouping classify them as political leaders, would be relatively inattentive to such sources in comparison with other elites. Finally, in a conventional modern dictatorship we might well expect all elites to be relatively more attuned to non-regime sources than are non-elites. As it turns out, political interest and political role in the Soviet system both dispose persons in the emigrant sample, and we think in the Soviet Union as well, to seek out non-official communications channels.

A fifth domain where the regime's capacity to mobilize can be assessed is preparedness and national security. For Stalin, it will be recalled, permanently operating factors gave a Soviet-type mobilization system an inherent advantage vis-à-vis capitalist states regarding waging of non-nuclear wars. Some version of that belief also exists in the Western literature on Soviet studies and on comparative foreign policy. Two areas where this theme has been most pronounced are military service and civil defense. Table 11 reveals the responses given by those males in the emigrant survey who became eligible to serve after 1964. The cell sizes are small and the results are not striking. What seems to emerge, though, is a somewhat greater disposition to avoid military service by the three elite groupings and conversely somewhat greater conformity by persons in the non-elite groupings. While a hypothesis intuitively plausible and consistent with other findings in the survey, it should, however, be stressed that the data do not permit the use of any stronger term than suggestive and they are included here primarily for completeness.

Table 10

Foreign Radio Listenership
Controlling for Interest in Politics

Did R listen to foreign radio stations?	I. Interested in Politics					
		Occupational Grouping				Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others
Yes	% = N =	98.9 89	96.5 82	95.4 645	91.8 424	91.5 399
Total	% = N =	90	85	676	462	436
						100.0 1749
II. Little Interest in Politics						
Yes	% = N =	86.4 19	87.5 42	74.1 123	64.2 208	60.8 236
Total	% = N =	22	48	166	324	388
						100.0 948

Chi-square = I - 15.03; II - 23.96
Significance = I - 0.00; II - 0.00

Table 11
Efforts to Avoid Military Service
1965-1980

Did R try to avoid serving?		Occupational Grouping					Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	Others	
Yes	% = N =	28.6 4	33.3 3	24.1 32	12.3 7	16.7 22	19.7% 68
Total	% = N =	14	9	133	57	132	100.0 345

Chi-square = 6.10
Significance = .19

Similar caution for different reasons should guide us in assessing the data generated by the survey of Soviet emigrants concerned civil defense mobilization. Those who worry about the relative preoccupation with civil defense preparedness in the United States and the USSR will take note that two-fifths of those in the sample who were working (predominantly) or going to school (in a few instances) remembered the location of the civil defense shelter closest to their place of work or school. Similarly, during the last two years before the end of the last normal period in the Soviet Union slightly more than a quarter of the sample that was working or going to school had gone to that shelter, while eight percent of the respondents reported that there was an evacuation drill in which persons in the respondent's school or work place had to leave town temporarily. By comparison with experiences in most other countries -- though probably not Switzerland and Sweden -- these figures are high and an indication of a country more mobilized for national security than the United States (Table 12).

Those who are more relaxed about such things will note that three-fifths of the relevant respondents in the emigrant sample did not even know the location of the shelter nearest their place of employment; that about three-fourths of these respondents had not been in the shelter for a drill during the last two years of their last normal period in the Soviet Union; and that more than ninety percent of those surveyed reported that their workplace had not had an evacuation drill in which persons left town during the respondent's last normal period. Whichever construction one places on these data, what appears most important for our theoretical concerns is that there is little differentiation across groupings, the only possibly significant

Table 12

Civil Defense Shelter Recall

Do you remember where the civil defense shelter closest to your job/school was located in the end of your last normal period?		
	%	N
Yes	41.3	259
Total	100.0	627
Did you ever leave your job to go to that shelter for a drill in the last two years of your LNP?"		
Yes	29.3	76
Total	100.0	259
In the LNP, was there ever an evacuation drill in which people at your (school/workplace) had to leave town temporarily?		
Yes	8.1	51
Total	100.0	627

distinction being between the largely blue collar "others" and all the rest (Table 13).

Viewed across the five categories of behavior I have described -- election-related behavior, behavior involving regime-dominated group participation, behavior related to regime-controlled media, behavior involving access to non-regime media, and behavior related to national security preparedness -- the portrait that emerges is one that provides a rather complicated view of political and social mobilization in the contemporary Soviet system. There is little differentiation across groupings in civil defense shelter knowledge, and regular attendance at people's militia and comrade's courts is an instance where rate of participation (or nonparticipation) is basically homogeneous across occupational groups. Nevertheless, there are no domains among those examined where mobilization is both unambiguously high and fundamentally homogeneous across groups.

With respect to elite political mobilization the picture is mixed. On some dimensions, working in elections, for instance, the case can be made that the regime succeeds in inducing the requisite affect from those with high-status positions. When we look at attention to the regime-dominated media, moreover, the data suggest that political leaders are reached disproportionately in ways consonant with a political elite mobilization model. It turns out though, according to this sample at least, that political elites are mobilized to politics but that they are also more likely than persons in other groupings to engage in behavior incongruent with regime-induced political mobilization. They are less likely to vote, more likely to read samizdat and more prone to listen to foreign radio. As Donna Bahry's

Table 13
Knowledge of Civil Defense Shelter Location

Civil defense shelter closest to R?		Occupational Grouping				Total
		Political Leaders	Managers	High Level Professionals	Low Level Professionals	
Yes	% = N =	42.9 15	48.6 17	46.4 104	41.6 62	41.1% 254
Total	% = N =	35	35	224	149	100.0 618

Chi-square = 9.48
Significance = 0.05

chapter in this volume also demonstrates (above, pp.), it is those who have jobs that evoke either "red" or "expert" who are most likely to engage in behaviors suggestive that they have not been mobilized exclusively by the political system. As Bahry also notes, participation rates in the urban Soviet Union bear striking resemblance to those in ^{West Germany for example,} ~~for instance West Germany.~~ What we are tapping here seems largely to be the social mobilization that everywhere accompanies industrialization and modernization. It is that which makes the behavior of elite groupings, taken collectively, differ from that of other groups in Soviet society.

Those who most engage in regime-conforming behaviors are the persons whom we have clustered under other, the largely blue collar group. They may be less likely than persons from elite groupings to avoid military service. They are less likely to read samizdat, less likely to listen to foreign radio and more likely to vote. They also participate less than others in electioneering. They read Soviet newspapers far less than their counterparts in the other occupational groupings, and they even engage in civil defense drills less. In short, while they conform more, they are mobilized less than are persons in other occupational groupings. For them the Soviet Union is a conventional dictatorship where, in Brezhnev's words, it is possible to "breathe easily, work well, and live tranquilly" (Gruliov ed. 1973, p. 119, as cited in George Breslauer, 1982, p. 192). Theirs, especially, is behavior that corresponds to findings about blue collar participation in other industrialized states. In terms of assessing the nature of the Soviet system, it is behavior that corresponds much more

to an image of a conventional dictatorship than to that of a mobilization system or some variant thereof.

Changes in mobilizational effectiveness over time.

A second way of assessing the nature of the Soviet dictatorship is provided by taking an historical perspective. A one-time survey is not the most useful source for efforts to assess change over time. Nevertheless there are some readily identifiable acts that take place at specific times in a person's life -- going to the university, getting a first job, becoming eligible to serve in the military -- which occur at more or less the same time for all persons or, in the case of the military, for all males in any given society. Consequently, one can, with caution, examine the pattern of responses to questions about these acts across a sample to ascertain whether there are systematic differences in the pattern at particular time periods. Some of these classes of events involve behaviors that are indicative of the regime's ability to harness the resources of society to its purposes.

Consider for instance the areas of education and first job. For a society where education is controlled by the state, an indicator of the regime's ability to utilize its citizens effectively is the extent to which educational experience and training have a bearing on the first job one gets. While there are lots of reasons why a citizen or the state's decision makers may prefer for its citizens to take a job that is not connected with their training, it seems plausible in general to assert that if a political system has effectively penetrated society, a substantial proportion of its citizens would work at a specialty that bears on one's training. In the USSR, if the experience of the emigrants is indicative, that appears to have been the case (see Table

14) throughout the period until 1976 -- with exceptions for periods (the first five year plans and during World War II) that we can readily explain by pressing regime needs. The last five years of the Brezhnev era suggest some change in that pattern. Only half the respondents whose first job occurred in that period worked in the specialty for which they had been trained.

Here immediately we see an example of a possible reasonable objection to extrapolation to the Soviet Union from respondents who left the Soviet Union. An almost visceral reaction to this finding would be: but these people are overwhelmingly Jewish, and they emigrated. Surely those facts are sufficient to account for the discrepant pattern.

Interestingly enough, such is not the case, as Table 15 reveals: There is essentially no difference in the response patterns of those whose first job came after 1975 regardless of their role in the decision to emigrate and regardless whether they were highly observant Jews or not. Hence the conclusion stands that in the second half of the 1970s there was an appreciable increase in the incongruence between educational training and first job elected. A somewhat similar indicator, in this instance, control over job selection, provides less evidence of change over time. When respondents were asked whether they had a choice in selecting their first job somewhat over half indicated that they did (54.9%), and no statistically significant trend emerges.

If, by contrast, one thinks of the regime's harnessing of society's forces in the workplace as entailing a situation where working the system through informal influence and protection is precluded, the pattern is quite different. "Blat vyshe chem Stalin" (Pull is above Stalin) used to be a standard refrain, but the accompanying table

Table 14

Year left higher educational institution	Did respondent work at specialty in first job?		
		Yes	Total
1930 or earlier	% = N =	64.7 11	17
1931-1935	% = N =	45.5 40	84
1936-1940	% = N =	76.1 67	88
1941-1945	% = N =	52.0 38	73
1946-1950	% = N =	70.3 71	101
1951-1955	% = N =	72.5 103	142
1956-1960	% = N =	73.7 151	205
1961-1965	% = N =	72.1 194	269
1966-1970	% = N =	75.7 277	366
1971-1975	% = N =	74.7 333	446
1976-1981	% = N =	50.0 168	336
	% = N =	1453	100 2127

Chi-square 105.53

Significance=0.00

Table 15

Work at First Job After Attending
Higher Educational Institution 1976-1981

All respondents		Proportion saying they worked at specialty
All respondents	% = N =	50.0 168
Observed Rosh Hashanah	% = N =	54.1 20
Played no significant role in decision to migrate	% = N =	50.0 13
Shared in decision	% = N =	51.0 99
Made decision	% = N =	48.3 56

suggests that under Stalin there was little room for blat at least in the initial stages of a career. What one notes though is an almost monotonic relationship over time. The closer we get to the present, the more likely is the respondent to have said that he or she used blat or influence to get the first job (Table 16).

Once again, it is perfectly reasonable a priori to wonder about the transferability of this finding to the contemporary urban Soviet Union. I recognize that recall distortions are ubiquitous in survey research. Nevertheless it strains credulity that the pattern identified in Table 16 is solely a product of some kind of systematic longitudinal bias in recall or response disposition. Likewise, one could always hypothesize that persons who emigrated would be particularly likely to be the kind who might have engaged in blat or protektsia. Controlling for the respondent's role in the decision to emigrate, however, does not

Table 16

The Role of Influence in Obtaining First Job

Year Began First Job		Did you use <u>blat</u> or <u>protektzia</u> to get your first job?	Total
		Yes	
1930 or earlier	% = N =	6.9 2	29
1931-1935	% = N =	11.7 7	60
1936-1940	% = N =	14.0 7	50
1941-1945	% = N =	10.6 5	47
1946-1950	% = N =	20.0 13	65
1951-1955	% = N =	25.8 17	66
1956-1960	% = N =	35.5 44	124
1961-1965	% = N =	32.8 38	116
1966-1970	% = N =	31.8 42	132
1971-1975	% = N =	43.6 61	140
1976-1981	% = N =	50.9 29	57
	% = N =	265	100.0 886

Chi-square = 61.73
Significance = 0.00
Tau-B = -.21

undermine the sense that the proclivity to work the system has increased over time. If we have tapped a trend that transfers to the changing Soviet experience -- and the pattern but not the frequencies is the same whether the respondent played no role in the decision to migrate, participated in the decision, or made the decision -- we have empirical confirmation of an important developmental change in the Soviet dictatorship, with developmental here explicitly not meaning modernizing. These data constitute empirical support for the argument, advanced most articulately by Ken Jowitt, that neotraditionalism is an increasingly apt characterization of the Soviet Union. Certainly these data are important for the question we are asking: namely, has the political system's capacity to mobilize changed over time. Absent what Jowitt terms a "social combat" task, and absent the political use of terror, task mobilization has given way substantially to "political capitalism" (cf. Jowitt, Soviet Studies, July 1983, pp. 275-297).

If we are witnessing a systemic phenomenon, it should be possible to observe this trend in other domains of Soviet life as well. One area that is amenable to empirical scrutiny through a general survey is that of military service. One critical indicator of a regime's ability to harness its citizens to regime goals is the ability to induce compliance to military conscription. Mobilization in the military sense in this respect is but a dimension of political mobilization. Once again, as in the case of behavior relating to first job, a monotonic relationship over time is discernible in responses to the question "Did you try to avoid having to serve?" (Table 17). The proportion of those who served either on active duty or in the reserve has remained basically stable at

approximately 80% over the years. But the reported incidence of attempts to avoid military service has grown steadily.

What are we to make of this? Once again an answer begets several questions. Is the reported service avoidance rate different depending on the respondent's role in the decision to migrate? On his proclivity to observe Rosh Hashanah? As Table 18 suggests, we have identified something that can not be discounted due to obvious attributes of the migrants that differentiate them from their Soviet confreres. That having been said, the parallelism between the trend with respect to attempted military service avoidance and use of influence and protection in securing one's first job is striking. The implication ought likewise to be similar: while the efforts at military service avoidance in the recent period are emphatically not such as to intimate that the end of Soviet power is imminent, the pattern observed should remind us that there really was a period, in the Stalin era, when by this criterion the Soviet Union was a mobilization system. That period is well behind the contemporary Soviet citizen. Rather, he has acted increasingly as though there were ways that politically adept people can gain considerable control over the decisions that affect their daily lives. Further, the contemporary Soviet citizen through his behavior, as evidenced in increased efforts at avoiding service, has illustrated the consequences for the Soviet system of the changes in political beliefs reported by Brian Silver (above, pp.) in this volume. Judging by the changes in behavior reported here, the mobilization system, propelled by the fuel of social transformation, has been replaced by a more conventional, albeit dictatorial, political system lubricated by the grease of blat and protektsia.

Table 17

Efforts to Avoid Military Service
Among Soviet Males

Period		Did you try to avoid having to serve?	Total
		Yes	
Pre-Stalin (<1930)	% = N =	5.6 2	36
Stalin (1930-1940)	% = N =	.0 0	58
WWII (1941-1945)	% = N =	5.7 7	123
Late Stalin (1946-1952)	% = N =	7.2 6	83
Early Khrushchev (1953-1959)	% = N =	8.7 13	150
Late Khrushchev (1960-1964)	% = N =	14.8 13	88
Brezhnev 1 (1965-1969)	% = N =	16.0 21	131
Brezhnev 2 (1970-1975)	% = N =	26.3 30	114
Brezhnev 3 (1976-1980)	% = N =	29.6 16	54
Missing	% = N =	31.9 23	72
Total	% = N =	131	100.0 909

Chi-square = 68.59
Significance = 0.00

Table 18

Efforts to Avoid Military Service
Among Soviet Males

		Did you try to avoid having to serve?	Total
		Yes	
1. Observed Rosh Hashanah	% = N =	12.9 22	171
2. Played no role in decision to emigrate	% = N =	18.2 4	22
3. Participated in decision	% = N =	12.1 64	527
4. Made the decision	% = N =	25.1 63	251
All respondents	% = N =	14.4 131	100.0 909

References

- Bauer, Raymond A., Inkeles, Alex, and Kluckohn, Clyde. 1959. How the Soviet System Works. New York: Vintage Books.
- Dahl, Robert. 1971. Polyarchy. New Haven: Yale University Press.
- Barghoorn, Frederick. 1972. Politics USSR. Boston: Little, Brown.
- DiFranceisco, Wayne, and Gitelman, Zvi. 1984. "Soviet Political Culture and 'Covert Participation' in Policy Implementation," American Political Science Review, 78, 603-21.
- Jacobson, Harold K., and Zimmerman, William. 1969. The Shaping of Foreign Policy. New York: Atherton.
- Sistematicheskii slovar' zaniatii. 1969. Moscow: Statistika.
- Friedgut, Theodore. 1979. Political Participation in the USSR. Princeton: Princeton University Press.
- Breslauer, George. 1982. Khrushchev and Brezhnev as Leaders. Boston: Allen and Unwin.
- Ken Jowitt. 1983. "Soviet Neotraditionalism: The Political Corruption of a Leninist Regime," Soviet Studies, Vol. 35, No. 3, pp 275-297.

Appendix A

The SIP General Survey Sample
Barbara A. Anderson and Brian D. Silver

THE SIP GENERAL SURVEY SAMPLE*

The respondents to the General Survey of the Soviet Interview Project are former Soviet citizens who emigrated to the United States.¹ Surveys of Soviet emigrants have relied on a variety of sampling techniques. Some have used snowball samples in which early respondents to the survey help to recruit later respondents. Others have used quota samples in which *a priori* target numbers of respondents with certain specified combinations of characteristics are established, and the sampling stops when the targeted number of interviews is completed.

The SIP General Survey I used a *stratified random sample*, based on the characteristics of the emigrants when they lived in the Soviet Union. Individual respondents were selected from a list that contained information about all eligible persons, defined by explicit eligibility criteria. The probability that given individuals were selected depended on the educational, regional, nationality, and city-size strata in which they fell. An effort was made to complete an interview with every selected individual. This method of sampling is less susceptible to self-selection by the respondents into the survey than snowball sampling or quota sampling, and it permits greater control over sample composition.

This chapter describes how the SIP General Survey I sampling frame and sample were defined. It analyzes the response rates and describes the basic demographic characteristics of the sample. And it discusses the issue of representativeness of the respondents -- to what referent Soviet population can the results of the survey be generalized?²

The Sampling Frame

Designing a sample for the General Survey required the specification of a sampling frame: the set of emigrants from which the sample of prospective survey respondents was to be drawn.³ The sampling frame was defined as all Soviet emigrants who arrived in the United States between January 1, 1979, and April 30, 1982, and who were

between ages 21 and 70, inclusive, at date of arrival. This range of dates of arrival includes the peak emigration year of 1979.

Only recent emigrants were included in the frame in order to minimize problems of recall and because the main purpose of the survey was to study *Soviet* life, not the processes of emigration or adjustment to life in the United States.⁴ In addition, most questions in the survey focused on the respondents' "last period of normal life in the USSR," a period that ended from a few months to several years before their arrival in the United States.⁵ On average, the month of arrival of the actual survey respondents was March, 1980, and the end of their "last normal period of life in the USSR" was December, 1978, a difference of fifteen months. Because the field work for the survey took place in 1983, with May 1983 the "average" month, the average length of time between the end of the "last normal period of life" and the interview was fifty-three months.⁶

To develop the frame, we constructed a list of nearly all adult Soviet emigrants to the United States who arrived during the appropriate period. The list was based on information obtained from family service organizations in the United States, and included an abstract of basic biographical information on each individual: date of birth, country of birth, date of arrival in the U.S., sex, nationality-religion, education in the USSR, occupation in the USSR, city of last residence in the USSR, and military service and military rank in the USSR.

Biographical abstracts were completed for 37,156 individuals, of whom 33,618 met the final eligibility criteria for General Survey I.⁷ The biographical abstract data were important not only for sampling but also for defining the make-up of the emigrant population itself. The information the emigrants could give us about the parent population from which they came depended in part on the mix of backgrounds and experiences of the emigrants. Although the predominant ethnic-religious makeup of the respondents, their overall high levels of educational attainment, and their origination predominantly from the European parts of the Soviet Union was known in advance, the

number of emigrants with specific combinations of characteristics, such as young persons with less than secondary education or non-Jews from small cities, was not known.

A large size for the sampling frame was desirable to increase the possibility of including in the sample respondents whose backgrounds were relatively rare among the emigrants as a whole. This would increase the diversity of any sample that could be drawn. Also, what *part* of the Soviet population the emigrants could represent depended on the characteristics of the individuals in the frame.

Characteristics of the Sampling Frame Population. We shall now describe the characteristics of the sampling frame and make some comparisons between the sampling frame, the sample, the respondents, and the Soviet population.

Column 1 in Panel A of Table 1 reports the number of eligible persons by year of arrival in the United States. Normal sampling error and the use of sample stratification criteria that intentionally favored the selection of individuals with particular backgrounds led to differences between the characteristics of people in the sample and people in the frame. The distribution by year of immigration for the sample (column 2) and for the General Survey I respondents (column 3) is less concentrated in the peak emigration year of 1979 than it is for people in the sampling frame (column 1).

The distribution of the frame population by age at arrival in the United States is presented in Column 1 of Panel B of Table 1. The overwhelming majority of persons in the frame, and hence also in the sample, had completed their education, and a large majority had considerable employment experience by the time they left the USSR. The distribution by age in the sample and among the actual survey respondents is similar to that for the sampling frame.

Ninety-nine percent of the eligible population was born in the USSR or in territories, such as the Baltic states, that are currently part of the USSR. Of the 168 people reported as born outside the USSR, 114 reported that they were born in Rumania

or Poland; it is likely that most of these 114 also were born in parts of Rumania or Poland that were subsequently annexed to the USSR.

The distribution of the sampling frame population by sex (Panel C of Table 1) reflects the numerical superiority of women over men in Soviet society, a product of differential war losses and the higher rates of mortality for men than for women during peacetime.⁸ The distribution in the sampling frame also reflects the fact that recent emigrants from the Soviet Union have primarily come as members of families. Seventy-eight percent of the respondents were married in their last period of normal life in the USSR. Of those who were married, 97 percent emigrated with their spouse, and 91 percent of the married couples emigrated with one or more of their children.⁹ Eighty-nine percent of the SIP General Survey I respondents emigrated with either their spouse, their children, or their spouse and children. Of the 2,389 respondents who had children at the end of their last normal period in the USSR, 84 percent emigrated with *all* of their children, and only 4 percent emigrated with *none* of their children.

The emigrants came overwhelmingly from cities. The urban origin of the emigrant population is not surprising. At the time of the 1979 Soviet census, 99 percent of Soviet Jews, 74 percent of Soviet Russians, and 62 percent of the entire Soviet population lived in urban areas.¹⁰ Furthermore, compared to the Soviet urban population, the emigrants come primarily from large and medium-sized cities (see column 1 in Panel D of Table 1). Ninety-seven percent come from cities that had populations of 100,000 or more in 1979. By comparison, only 38 percent of the entire Soviet population, and 60 percent of the Soviet urban population, lived in cities of 100,000 population or more in 1979.

Moreover, 88 percent of the emigrants in the sampling frame came from Soviet cities that had populations of 500,000 or more in 1979.¹¹ In contrast, only about 20 percent of the total Soviet population, and about 32 percent of the urban Soviet population, lived in cities of 500,000 population or more in 1979.

The big-city origins of the emigrants does not mean that only the Soviet population from large cities can be represented in the survey. There were enough people in the sampling frame from medium-sized cities to permit purposive oversampling of people from medium-sized cities. The proportion of respondents from medium-sized cities is approximately twice as large as the proportion of persons in the sampling frame who emigrated from medium-sized cities (see Panel D of Table 1).

The emigrants in the sampling frame came primarily from the European parts of the USSR, especially the Soviet West (Ukraine, Belorussia, and Moldavia) and the Russian Republic (RSFSR) (see Panel E of Table 1). For purposes of sample design, however, there was a sufficient number of people in each of five major Soviet regions (groups of republics) to approximate in the sample the distribution by region of the Soviet population that lived in cities with populations of 100,000 or more (column 6 of Panel E).

Accordingly, the sample was designed so that the proportion of the people in sample who originated in the RSFSR would be almost twice as large as the proportion of people in the sampling frame who originated in that republic. The proportion from the Soviet West was reduced correspondingly to about half the proportion of the sampling frame that had come from that region (compare columns 1, 2, and 3 of Panel E of Table 1). Also, to assure adequate regional diversity in the sample, minimum target sample sizes were established for the Baltic and Transcaucasia.

Emigrants from the RSFSR and the West came predominantly from a few cities. The seven cities providing the largest numbers are Kiev (7,384), Odessa (4,881), Moscow (3,781), Leningrad (3,760), Minsk (2,133), L'vov (1,493), and Kishinev (1,286). Those who came from Central Asia, the Transcaucasus, and the Baltic, came overwhelmingly from the largest cities in those regions -- especially the republic capital cities of Riga (1,328), Tashkent (991), Baku (547), Tbilisi (348), Vilnius (240), and Dushanbe (90) (see Anderson and Silver, 1986a).

Seventy-five percent of the survey *respondents* came from the republic capitals (including Leningrad). In every region except the Soviet West, over 80 percent of the respondents came from republic capitals. In the West, only 50 percent of the respondents came from republic capitals (Minsk, Kiev, and Kishinev).

Panel F of Table 1 summarizes the data on educational attainment.¹² Compared to the Soviet urban population, the emigrants as a whole are highly educated, in line with the high average educational levels attained by Soviet Jews. They also have a somewhat higher average educational level than the Soviet population residing in large cities. Forty-four percent of the people in the sampling frame had achieved at least some higher education (column 1). In contrast, in the adult Soviet population in the republic capital cities taken together in 1979, less than 30 percent had attained that level of education. The sample was designed to select people from the frame in proportions that approximated the estimated distribution by education of the Soviet adult population in large cities in 1979.

Recent Soviet emigrants are primarily Jews or members of families that included Jews. As is shown in Panel G of Table 1, 98.4 percent of all people in the sampling frame were Jews. To maximize the ethnic diversity of the sample, all known non-Jews were included in the sample, so that about 85 percent of the emigrants in the sample were Jews.

The Referent Soviet Population

Building the sampling frame was one step in identifying a pool of potential survey respondents whose life histories would shed light on Soviet experience. At the same time, the characteristics of the pool of emigrants determined which segment of Soviet society *could* be represented in the sample. For example, since there are almost no people from rural areas in the sampling frame, it is not possible to draw a sample from the emigrants that represents the experiences of the rural sector of Soviet society.

Similarly, no sample drawn from this sampling frame could represent the experiences of most of the major non-Russian nationalities, especially the Moslem nationalities.

Recent emigrants are diverse, however, with respect to education, occupational experience, and geographic origins in the USSR, and most of their everyday experiences in the Soviet Union preceding the traumatizing experiences associated with emigration are likely to be reflective of the experiences of an important sector of Soviet society. By using the information about individuals in the sampling frame to select a sample that maximized the diversity of backgrounds of the survey respondents, the sample could approximate some aspects of the demographic composition of the "adult European population in large and medium-sized Soviet cities." We term this the *referent Soviet population*.

The main purpose of identifying the referent population was to clarify the parts of the Soviet population that the survey respondents could *not* represent, and to identify a sector of Soviet society that the survey respondents *could* represent if the respondents were appropriately selected from the frame and if the survey instrument provided information to test for various forms of response bias.¹³ The concept of a referent population was thus a guide for the sample design and for interpretation of the survey results, not an exact blueprint to be executed in the sample.

The Sample

Size. The initial sample size was set at 3,750 under the expectation that 80 percent of the individuals in the sample would complete the interviews, yielding 3,000 completed interviews, or respondents. The target of 3,000 respondents was established so that each of the three survey supplements would have 1,000 respondents.¹⁴

Sampling Procedure. The SIP General Survey sample was designed to approximate the educational and regional composition of the referent Soviet population. It was also designed to diversify the sample on the basis of nationality and size of city compared to the distribution in the frame, but not to approximate those distributions in the referent Soviet population.

To accomplish these goals, the sample was stratified. Although each person in the frame had a known probability of being selected into the sample, the probability varied with the individual's nationality, education, size-of-city, and region of origin within the USSR. First, targets were set for the overall educational, regional, and city-size distributions. None of these was modelled to match the referent Soviet population exactly, but they were made to be much more like the referent Soviet population than like the frame population. Second, all eligible non-Jews were selected into the sample.¹⁵ Third, an iterative, random-selection procedure was used to draw the remainder of the sample (the Jews) so that target distributions by education, city-size, and region were achieved.¹⁶ The distributions of all these variables in the sample are shown in column 2 of Table 1.

Had the General Survey I sample been a simple random sample of eligible individuals (the frame), it would have differed much more sharply from the referent Soviet population. By stratifying the sample, persons in the frame whose educational level was "completed secondary education or less" were more likely to be chosen than persons who had attained higher education. Persons in the frame from medium-sized Soviet cities were more likely to be selected than persons from large cities. And persons from the RSFSR, the Baltic, and Transcaucasia were more likely to be chosen than persons from the Soviet West (Belorussia, Ukraine, Moldavia) or Central Asia.¹⁷ Minimum sample sizes were established for the Transcaucasus and the Baltic --exceeding their relative proportions in the referent Soviet population -- to permit multivariate analyses based on the individuals from each of these regions.

Modelling the composition of the sample on the demographic composition of the referent Soviet population reduced the unrepresentativeness of the sample. In two respects, however, no sample of recent Soviet emigrants could match the referent Soviet population. First, any sizeable sample had to consist mostly of Jews. Second, for obvious reasons, all persons in the sample were emigrants.

All eligible non-Jews were included in the sample not in order to mimic the referent Soviet population but rather to provide a comparison or control group for assessing the effect of ethnic differences on patterns of survey responses. A similar rationale applies to the effort to increase the number of respondents from medium-sized cities. This permits researchers to test for the effects of city size on response patterns, particularly reports of economic behavior.

The main control for bias linked to the self-selection or to special experiences of the respondents as emigrants was in the design of the questionnaire, not of the sample. For this purpose, a series of questions was included concerning the respondents' motivation for emigration, their role in the decision to emigrate, and their adjustment to life in the United States.¹⁸

Response Rates. The final General Survey I sample was comprised of 3,738 individuals selected from the sampling frame.¹⁹ Of these, 187 were subsequently dropped for one of three reasons: a) they were deceased; b) they were too ill to participate in the survey; or c) they were no longer residing in the United States. Because these people did not refuse to participate in the survey, we interpret them as "ineligibles" rather than as "refusals." Individuals whose addresses were never confirmed are treated as eligible, since some of these individuals may have actively avoided participation in the survey by not responding to letters of inquiry or other efforts by the interviewers or the National Opinion Research Center to contact them.²⁰

Of the 3,551 persons remaining in the sample, 2,793 completed the interview, for a response rate of 79 percent. This rate compares favorably with that in most other sample surveys conducted in this country.

Participation in the survey was voluntary, and respondents were assured that both their answers and their participation in the survey would be confidential.²¹ Of those who completed the interview, 221 participated only after initially stating that they did not want to participate or after they did not respond to initial inquiries.

Of the 758 persons in the sample (of 3,551) who did not participate in the survey, 647 either "refused" to participate or broke off the interview before completing it. Another 91 persons could not be located. And 20 were not interviewed for some other reason.

Table 2 shows the response rates for various groups of people. There was no difference in the response rates of Jews and non-Jews. As is true of many surveys, persons with higher education were more likely to agree to participate in the SIP General Survey than the less educated. Although younger people were slightly more likely to complete the interview than older people, the difference in the response rate associated with education is not a function of age. Instead, as is shown in Figure 1, more highly educated respondents had higher response rates than less educated respondents in each age group.

Figure 1 also reveals that the differences in the response rates associated with age are negligible, once differences in education are taken into account. The only sharp deviation is among persons age 21-30 who had less than complete secondary education, but only 37 persons in the sample (21 of whom completed the interview) who were in this category.

Men in the sample were more likely to complete the interview than women (see Table 2). This difference is not a function of the difference in educational attainment of men and women, for at each educational level men were more likely to complete the interview than women.

In summary, the differences in response rates among educational groups had more of an impact on the composition of the final respondents than differences by age, sex, or nationality. The differential by education moved the composition of the respondents more toward that of the sampling frame, and away from that of the referent Soviet population (compare columns 1-3 in Table 1). Overall, however, the response rates did not vary greatly with social background.

Weighting the Cases

Purpose. Weights are used in statistical analyses so that the weighted respondents will resemble more closely the population to which the researcher hopes to generalize the results than would the unweighted respondents. When a simple random sample is drawn from a population of interest, weights are generally not necessary. Given normal sampling error, the characteristics of the respondents will be identical to those of the population from which the sample is drawn. If the sample is disproportionate, so that individuals in the population do not have an identical probability of being selected into the sample, the characteristics of the unweighted set of respondents will not match those of the population of interest. The use of weights has the effect of counting some cases more heavily than others in the analysis, thus compensating for the initial disproportionate sampling.²²

Stratifying the sample drawn from the list of eligible emigrants helped to bring the characteristics of the sample more into line with those of the referent Soviet population than would have been true of a simple random sample drawn from that list. For several reasons, however, further adjustments to the composition of the respondents are necessary to make it more similar to the referent population. First, as discussed earlier, the stratification procedure did not bring the sample completely into line with the referent population. Second, information about respondent backgrounds that was known in advance of the survey was less accurate and less complete than information obtained in the survey itself, particularly regarding the respondents' educational attainment. Third, how closely the actual respondents would match the characteristics of the referent population depended on how the response rates varied among different groups of respondents.

Method. Information on the respondents' Region (five categories), education (three categories), and age (five categories) was used in devising the weights. As a preliminary step in constructing the weights, we estimated the three-way distribution of age-by-education-by-region in the referent Soviet population -- to define the appro-

priate share that each of the resulting 75 population categories should represent among the weighted survey respondents.

The most formidable problem in estimating the education-by-age distribution of the referent Soviet population is that neither age distributions nor education distributions by age have been published for the most recent Soviet census year, 1979. This census date corresponds most closely to the date of the "last normal period of life" of respondents to the first SIP General Survey. Therefore, we estimated the distributions indirectly using an iterative fitting procedure from 1970 and 1979 Soviet census data, based on the characteristics of the populations in republic capital cities.²³

The three-way crosstabulation of the region, education, and age variables defines 75 population categories to which weights were assigned. Each category can be represented as a proportion of the total population -- so that the sum of the proportions across all 75 categories is 1.000. The weight assigned to survey respondents in any given cell is calculated as the proportion of the referent Soviet population in that cell divided by the proportion of the respondents in that cell.

Thus, if the proportion of respondents in that cell is smaller than the proportion of the referent population in that cell, the weight assigned to respondents in that cell will be greater than unity, thus causing respondents in that cell to count more heavily than they would otherwise. If the proportion of respondents in the cell is larger than the proportion of the referent population in that cell, the weight assigned will be less than 1.00 -- to reduce the relative contribution of those respondents to the overall distributions. The actual weights for the first SIP General Survey vary from 6.28 to 0.22. Thus, if analysts choose to use the weights, a respondent with a weight of 6.0 would "count" as six respondents; a respondent with a weight of .25 would count as one-fourth of a respondent.

In some of the cells of the age-by-education-by-region distribution, there were very few respondents. No respondents from the Baltic and only one respondent from the RSFSR, for example, fell into the age range 21-30 at date of arrival and had less

than complete secondary education. To avoid assigning extraordinarily high weights to young persons with less than complete secondary education for some regions, we collapsed the cells across regions for persons who had less than complete secondary education for each of the three age categories 21-30, 31-40, and 41-50. Had we not done this, no weight could have been assigned to respondents age 21-30 with less than complete secondary education from the Baltic, and a weight of 57 would be needed for the one respondent from the RSFSR who fell into that age-by-education cell.

The main consequence of collapsing across regions -- for those with less than completed secondary education and who were age 50 or under at date of arrival -- is that the regional distribution of the weighted respondents does not match the estimated regional distribution of the referent Soviet population. This is shown in the distributions in columns 5 and 6 in Panel E of Table 1. But the target distributions for education and age separately as well as in combination are matched exactly (see Panels B and F).

Average weights for respondents by age and education are shown in Table 3.²⁴ Cases that are weighted most heavily are younger persons with less than secondary education. Accordingly (as shown in Table 3), the 15 actual respondents who were age 21-30 at date of arrival in the U.S. and had less than completed secondary education would count at 94 respondents if the data are weighted, and the 84 respondents who were age 61-70 at date of arrival and had some higher education would count as 60 respondents in a weighted data analysis.

The *total* number of respondents (the *N*) is the same for the weighted cases and the unweighted cases. By multiplying the number of actual cases in each cell by the weight applied to each case, the total number of respondents for the weighted cases comes to 2,793.

Weights and the Referent Population. Most analyses of the SIP General Survey are not likely to use weighted data. This is because most statistical analyses will focus on the *relationships between variables*, rather than on either the overall frequency

distributions or the "average" score or answer found among all respondents. When the focus is on the relationships between variables, whether one uses the weights will seldom affect analytic results.²⁵

If one is interested, for example, in how the level of support for the Soviet regime varies with the respondent's education, it does not matter whether 42 percent of the respondents had some higher education or 27 percent had some higher education (which is the adjustment in the proportion with some higher education that would result if one shifted from using unweighted data to using weighted data). If one were interested, however, in measuring the *average* level of support for the regime among *all* respondents, then using weighted data would increase the apparent overall level of regime support because respondents who have higher education are less supportive of regime norms than are respondents with secondary or lower education.²⁶

Thus, the weights are an auxiliary tool that may be useful for some types of analysis of the General Survey data. But they are not mandatory for all analyses, particularly those which focus on the relationships between variables rather than on univariate distributions or measures of central tendency for the entire set of respondents.²⁷

The Question of Generalizability

The logic that applies in determining whether or not to weight the responses in analyses applies also to whether it is important that respondents exactly match the demographic characteristics of the referent Soviet population. The validity of any generalization from the survey to the referent Soviet population requires more than a mechanical matching of the socio-demographic characteristics of the respondents as a whole and the referent population.

It is more important to establish that survey respondents with specific socio-demographic backgrounds are similar to persons with the same background who did not emigrate from the USSR, or who were not Jewish. This is not just a sampling issue. Many researchers have compared the distributions on variables of interest in the SIP

General Survey with analogous distributions for the Soviet population in official Soviet publications. When these distributions are similar, one can have greater confidence in the results of multivariate analyses using the SIP data.

Diversification of the sample, especially by nationality, coupled with the use of a stratified random sample based on a list of the eligible population, provides another basis for assessing the sensitivity of responses to potential bias. The concept of a referent Soviet population is relevant not because it represents the population from which the sample is drawn and against which the sampling error could be determined in precise statistical terms. Rather, it is important because it provides a referent sector of Soviet society with whose experiences and behavior the SIP General Survey respondents are most likely to correspond.

Notes

- * **Acknowledgments:** We would like to thank Mike Coble and Amy Hsu for the graphic work, Cynthia Buckley and Victoria Velkoff for research assistance, and Robert Lewis and Michael Swafford for helpful advice.
- ¹ In this appendix, we describe the sample for the *first* SIP General Survey. A follow-up survey, based on Soviet emigrants who arrived in the United States between May 1, 1982, and December 31, 1985, has also been conducted. When it seems necessary to avoid confusion, we shall refer to the first SIP General Survey as General Survey I.
- ² Several aspects of the question of representativeness and bias are addressed in the chapters by Bahry, Millar, and Silver in this volume, as well as in Bahry (1985).
- ³ The sampling frame for the SIP General Survey was also used for developing samples for the specialized or "S" projects, which involved interviews of people with special experiences, such as in economic planning, local government administration, and law.
- ⁴ The survey did contain a large number of questions concerning emigration experience and immigrant adjustment. These were designed primarily as controls for potential response bias.
- ⁵ The "last normal period of life in the USSR" was defined operationally in the survey as the five years preceding the major disruption in their lives associated with the decision to emigrate. For most respondents, this disruption was the act of applying for permission to emigrate.

- ⁶ Despite this time lag, the respondents appear to have had excellent recall of life-history events. For discussion, see Anderson and Silver (1986b).
- ⁷ Armenian emigrants from the USSR to the USA were excluded from the sampling frame because 60 percent of the Armenians on whom biographical information was gathered were not born in the USSR but instead were individuals who repatriated to the USSR after World War II (primarily from Middle Eastern and Mediterranean countries), and most of the other Armenians were members of their families. Thus, it seemed likely that much of their *Soviet* experience would not be typical even of most Soviet Armenians.
- ⁸ For further discussion, see Anderson and Silver (1986c).
- ⁹ The few exceptions when the spouse did not emigrate with the respondent are divided roughly evenly into four categories: 1) spouse was denied an exit permit (or held a sensitive job); 2) spouse stayed with relatives; 3) spouse was too ill to emigrate; 4) spouse "did not want to go."
- ¹⁰ Figures that we cite for the Soviet population in 1979 are based on the 1979 Soviet census. We either derive them directly or calculate them from data published in USSR, TsSU (1984).
- ¹¹ For purposes of sampling, we included the four republic capitals (Ashkhabad, Dushanbe, Tallinn, and Vilnius) that were less than 500,000 in population in 1979 with the cities of 500,000 or more. See Anderson, Silver, and Lewis (1986).
- ¹² For further details, see Anderson and Silver (1986a).

- ¹³ The main sources of response bias with which we were concerned were the effects of emigrant selection and experience, that is, the fact that most respondents were Jews, and the accuracy of recall.
- ¹⁴ On the structure of the survey instrument, see Millar's introductory chapter to this volume. All respondents completed a common set of "Core" questions; respondents were then assigned randomly to receive one of the three variant "Supplements" so that about one-third of the respondents completed each of the supplements. The actual numbers completing the three supplements, which were designated by the color of their face-sheets as orange, blue, and green, were 926, 933, and 922, respectively. Twelve respondents completed no supplement.
- ¹⁵ The information about the nationality of the persons in the sampling frame was not complete. Based on the data obtained in the survey itself, the nationality of the actual respondents could be determined with greater precision.
- ¹⁶ See NORC (1985): Appendix E.
- ¹⁷ In addition, *within* the West, a maximum of 100 persons was to be selected from Odessa.
- ¹⁸ Analysis of the General Survey I data indicates that responses to questions related to religious behavior and to perceptions of discrimination are very sensitive to the ethnic or religious affiliation of the respondent, but responses to questions dealing with most other issues are not sensitive to the respondent's ethnic or religious background. See Bahry (1985).

- ¹⁹ The initial size of 3,750 was reduced to 3,738 when it was discovered that 12 "ineligible" persons had inadvertently been included, before any contacts were made with potential respondents.
- ²⁰ The effort to obtain current addresses for persons in the sample began only after the sample was drawn. It would have been wasteful and prohibitively expensive to gather this information for all 33,618 persons in the sampling frame. Of the 3,738 persons in the final sample, 91 could not be located.
- ²¹ For a description of the steps taken to assure confidentiality, see NORC (1985): 40-42.
- ²² For readers who are not familiar with how weights are applied in practice, it may be useful to note that major statistical software programs, such as SPSS^x, have built-in routines that automatically weight the cases at the user's option. The user need only designate the name of the variable that is to be used to weight the cases.
- ²³ A detailed discussion of the method of development of demographic estimates for the weights is given in Anderson, Silver, and Lewis (1986a).
- ²⁴ These are averages, because they do not reflect the differences in the weights related to the respondents' region of residence in their last period of normal life in the USSR.

²⁵ A major exception is when the analysis focuses directly on the relation between age and education -- two variables whose relationship is most severely adjusted in the weights -- or on the relation between age, education, and another variable that is correlated with both age and education, such as income. See the chapter by Anderson in this volume for an analysis of the relation between age, education, and income among SIP General Survey respondents.

²⁶ See the chapter by Silver in this volume.

²⁷ The main effect of using the weights when one engages in multivariate analysis is on the amount of variance in the dependent and independent variables. Hence, whether one uses the weights will have a much greater effect when one employs correlation coefficients or standardized regression coefficients in statistical analyses than when one uses unstandardized coefficients. For most purposes it is probably preferable to use unstandardized coefficients for analyzing both the weighted and unweighted SIP data, because the amount of variance among the respondents is substantially affected by *a priori*, and inevitably somewhat arbitrary, decisions about the composition of the sample.

References

- Barbara A. Anderson and Brian D. Silver. 1986a. Descriptive Statistics for the Sampling Frame Population. *Soviet Interview Project Working Papers*, No. 2, Revised.
- _____. 1986b. The Validity of Survey Responses: Interviews of Multiple Respondents in a Household from a Survey of Soviet Emigrants. *Soviet Interview Project Working Papers*, No. 14.
- _____. 1986c. Sex Differentials in Mortality in the Soviet Union: Regional Differences in Length of Working Life in Comparative Perspective. *Population Studies*, 40 (July): forthcoming.
- Barbara A. Anderson, Brian D. Silver, and Robert A. Lewis. 1986. Demographic Estimates for the Post-Sampling Weights of the SIP General Survey. *Soviet Interview Project Working Papers*, No. 4, Revised.
- Bahry, Donna. 1985. Surveying Soviet Emigrants: Political Attitudes and Ethnic Bias. Manuscript, Department of Politics, New York University.
- NORC [National Opinion Research Center]. 1985. *Soviet Interview Project Methodological Report*.
- USSR, TsSU [Tsentral'noe statisticheskoe upravlenie]. 1984. *Chislennost' i sostav naseleniia SSSR: Po dannym Vsesoiuznoi perepisi naseleniia 1979 goda*. Moscow: Finansy i statistika.

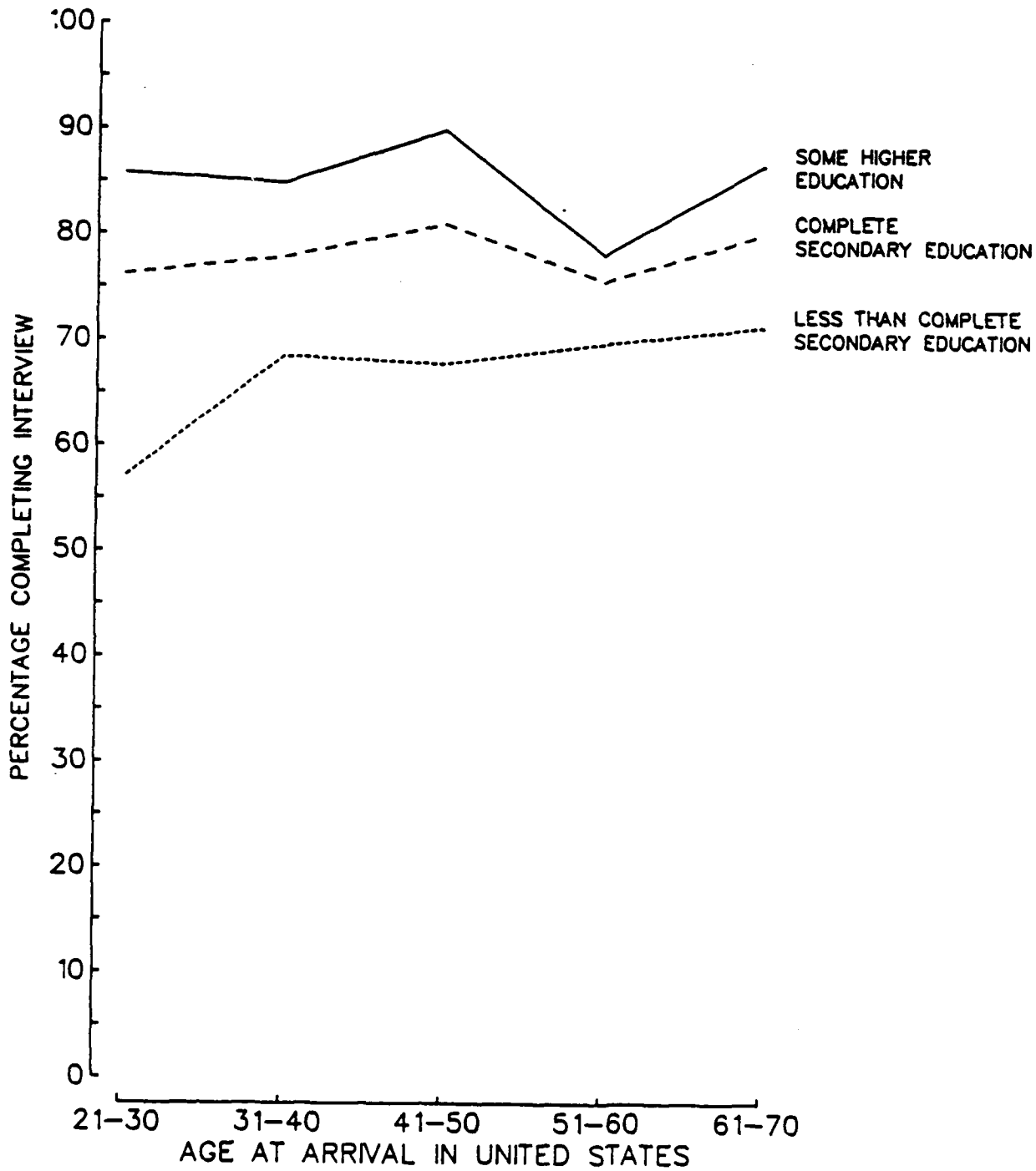


Figure 1. Percentage Completing General Survey by Education and Age at Arrival in the United States

TABLE 1. Comparison of Characteristics of Sampling Frame, Final Sample, SIP Respondents, and Referent Soviet Population^a

	Sampling Frame	Final Sample	Respondents [Frame Data]	Respondents [Survey Data]		Referent Soviet Population Estimate
	(N=33618)	(N=3551)	(N=2793)	Unweighted (N=2793)	Weighted (N=2793)	
	(1)	(2)	(3)	(4)	(5)	(6)
A. <u>Arrival Year</u>^b						
1979	55.1%	45.2%	44.3%			
1980	30.3	34.4	33.8			
1981	13.9	19.1	20.5			
1982	.6	1.3	1.4			
Total	99.9%	100.0%	100.0%			
B. <u>Age at Arrival</u>^c						
21-30	21.2%	21.5%	21.6%	21.6%	24.7%	24.7%
31-40	25.7	25.3	25.7	25.6	25.9	25.9
41-50	21.0	20.3	21.3	21.2	21.5	21.5
51-60	15.9	16.6	15.6	15.7	15.4	15.4
61-70	16.1	16.3	15.7	15.9	12.4	12.4
Total	99.9%	100.0%	100.0%	100.0%	99.9%	99.9%
C. <u>Sex</u>						
Men	45.4%	42.6%	43.4%	43.4%	43.2%	
Women	54.6	57.4	56.6	56.6	56.8	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	
D. <u>City Size</u>^d						
500,000+	88.3%	80.8%	81.7%	80.2%	78.8%	
100-499,999	9.1	16.8	16.0	17.1	18.0	
< 100,000	2.5	2.4	2.3	2.7	2.2	
Total	99.9%	100.0%	100.0%	100.0%	100.0%	
E. <u>Region</u>^e						
RSFSR	24.2%	44.3%	47.0%	46.0%	52.7%	60.5%
West	63.9	34.5	33.6	34.7	25.4	21.0
Baltic	5.2	5.1	5.2	5.6	2.7	2.9
Transcaucasia	2.9	5.3	5.1	5.0	5.1	5.0
Central Asia	3.8	10.8	9.1	8.7	14.1	10.7
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.1%

TABLE 1 -- Page 2

	Sampling Frame	Final Sample	Respondents [Frame Data]	Respondents [Survey Data]		Referent Soviet Population Estimate
	(N=33618)	(N=3551)	(N=2793)	Unweighted (N=2793)	Weighted (N=2793)	
	(1)	(2)	(3)	(4)	(5)	(6)
F. Education						
Some Higher	44.1%	33.8%	36.8%	41.9%	27.3%	27.3%
Complete Sec.	38.5	45.3	44.8	40.7	40.6	40.6
< Comp. Sec.	17.4	20.9	18.4	17.4	32.1	32.1
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
G. Nationality^f						
Jews	98.4%	85.7%	85.7%	82.8%	83.1%	
Non-Jews	1.6	14.3	14.3	17.2	16.9	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	

^a Figures for the sampling frame and sample (columns 1 and 2) are derived from the "frame data" -- the biographical abstracts developed for sampling. Figures for the respondents in column 3 are also derived from the pre-survey biographical abstracts. Figures for the respondents in columns 4 and 5 are based on the SIP General Survey results, unless otherwise noted. Figures for the referent Soviet population (column 6) are derived from Soviet census data.

^b All arrivals in 1982 were in the first four months of the year.

^c Age in columns 1-5 is age at arrival in U.S. The age distribution in column 6 is as estimated for 1979. See Anderson, Silver, and Lewis (1986).

^d City sizes are based on the population in 1979. The largest size category includes republic capital cities even if they were less than 500,000 population. City size based on the frame data (columns 1-3) refers to size of city in which persons were last employed in the USSR. City size based on the General Survey data (columns 4 and 5) refers to the size of city in which persons lived at end of their last normal period of life in the USSR.

^e The region categories based on the frame data refer to the region where persons lived when last employed in the USSR. Region based on the General Survey results refers to the region in which persons lived at the end of their last period of normal life in the USSR. Republics included in the multi-republic regions: West (Belorussia, Moldavia, Ukraine); Baltic (Estonia, Latvia, Lithuania); Transcaucasia (Armenia, Azerbaidzhan, Georgia); Central Asia (Kazakhstan, Kirgizia, Tadzhikistan, Turkmenistan, Uzbekistan.) The figures in column 6 refer to the regional distribution of the Soviet population in cities of 100,000 population or more in 1979.

^f For columns 4 and 5, persons who were Jewish by self-identified nationality or religion are classified as Jewish; all others are classified as non-Jews. In both columns 4 and 5, if those who were children of Jews (but not self-identified as Jewish by nationality or religion) were counted as Jews, then 87.4% of the respondents would be Jews.

TABLE 2. Percentage of Persons in Sample Completing the Survey, by Education, Age, Sex, Nationality, and Size of City of Last Employment in USSR^a

	Percent Completing Survey	Base Number in Sample (N=3551)	Number Completing Survey (N=2793)
<u>Education</u>			
Some Higher	85.6	1200	1027
Complete Secondary	77.8	1609	1257
Less than Complete Secondary	69.3	742	514
<u>Age At Arrival in U.S.</u>			
21-30	79.1	764	604
31-40	80.1	898	719
41-50	82.6	720	595
51-60	73.9	590	436
61-70	75.8	579	439
<u>Sex</u>			
Men	80.3	1511	1213
Women	77.5	2040	1580
<u>Nationality</u>			
Jews	78.7	3042	2394
Non-Jews	78.4	509	399
<u>Size of City of Last Employment in USSR</u>			
500,000+	79.6	2868	2283
100,000-499,999	74.7	598	447
Less than 100,000	74.1	85	63

^a The characteristics used in this table are from the pre-survey sampling frame data, not the survey results.

TABLE 3. Average Weights Assigned by Educational Level and Age at Arrival in the United States^a

	Education			
	Some Higher	Complete Secondary	Less than Comp. Sec.	All
<u>Age at Arrival</u>				
21-30	.65	1.34	6.28	1.15
(Unweighted N)	(275)	(312)	(15)	(602)
(Weighted N)	(179) ^b	(417)	(94)	(690)
31-40	.69	.95	5.00	1.01
(Unweighted N)	(371)	(311)	(34)	(716)
(Weighted N)	(258)	(296)	(171)	(724)
41-50	.54	1.09	2.65	1.02
(Unweighted N)	(314)	(194)	(83)	(591)
(Weighted N)	(169)	(211)	(220)	(600)
51-60	.76	.75	1.46	.98
(Unweighted N)	(127)	(170)	(142)	(439)
(Weighted N)	(96)	(128)	(207)	(431)
61-70	.71	.54	.98	.78
(Unweighted N)	(84)	(150)	(211)	(445)
(Weighted N)	(60)	(82)	(206)	(347)
All	.65	1.00	1.85	1.000
(Unweighted N)	(1171)	(1137)	(485)	(2793)
(Weighted N)	(762)	(1135)	(897)	(2793)

^a The weights shown in this table are averages because the actual weights vary also according to the region in which the respondent resided in his or her "last period of normal life" in the USSR. See Anderson, Silver, and Lewis (1986) for the weights by age, education, and region.

^b Weighted N's are rounded to the nearest integer.